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ESSAYS, MONOGRAPHS, AND CASES.

Moral Insanity in Relation to Criminal Acts. By Dr. J. PARIGOT, Late Commissioner in Lunacy and Chief Physician of the Establishment of Gheel, Belgium; Honorary Professor of the University of Brussels; Member of several Academies and Learned Societies; Founder of a Private Asylum for Insane, conducted on the Belgian System of Free Air and Family Life, at Sing Sing, N. Y.

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Our desire being to investigate certain forensic difficulties bearing upon philosophical desiderata concerning volition, and wishing also to demonstrate the absolute necessity of a coexistence of physical with psychical signs to allow a determination of the real mental state of persons supposed to be insane, or simulating insanity, let us state at the outset what are the general principles upon which our opinions are founded.

The Divine law which regulates our intercourse with our fellow-creatures, and even with all nature, is given to us in two words of the Christian faith—*Love* and *Charity*. These words contain the sub-

stance and qualities of human justice.* Some philosophers have considered justice as a sort of mystical idea. We believe it to be simply a function of our conscience, the source of our rights and duties in the social order. Every man feels that his conscience has been made the seat of that eternal principle by which the universe is regulated. Therefore is it that justice is not only found in books of laws made by nations differing in religion, manners, and habits, but that it exists all the world over as a peculiar feeling of our soul, which enables man in every part of the globe to judge of the moral value of his acts.

Man is complete only when he is conscientious; and moral liberty being one of his attributes, it is clear that he is responsible when he has been able to choose between right and wrong; else liberty ought not to be said to be a power that enables us to act in spite of a known motive of action.

The general principles deducible from these views are, as to the insane:

1st. That love and charity require the exercise of the best means to cure their infirmity. ("They are unable to help themselves; we must actively do for them what we would desire to be done for us.")

2nd. That they ought never to be punished for offences or crimes committed under the influence of their malady; and as to the public:

3d. That society has a full right to employ the most effective means, consistent with civilization, to guard itself against crimes committed by insane persons.

If the possession of conscience distinguishes man in the whole world, it must nevertheless be observed that it is more by sensibility of feelings than by intellectual supremacy, that man understands what he has to do to live in society. Insanity, in this respect, begins only when a man is no longer fit to live completely free, because he has lost the *common sense* on which social order is founded. We have long ago, on several occasions, tried to establish the fact that the insane are very rarely completely bereft of that sensibility of feelings; and that a peculiar family life, under a certain amount of personal and social liberty, with proper therapeutical treatment, is the best and cheapest means for a prompt cure.† But we are ready to admit that when a lunatic

* The ancient Greek philosophers of the school of Socrates, and especially that great man, have shown first, that justice was regulated by unwritten laws, of a moral nature, inspired by the Divinity.

† A very few maniacs and diastropehal subjects must be held in confinement on account of the aggressive form of their disease.

retains moral notions, it is more by a sort of reflex action of an anterior and past state of his conscience, than by its actual capacity.

In previous writings, we have defined *human mind* to be the manifestation or outward evidence of the soul by organic and vital agency; thus mind is, and can only be understood to be, subject to the material conditions of life, though remaining the unique expression of our spiritual nature. We know nothing about the essence of things, and, of course, know nothing, therefore, of the intimate nature of life, disease, and insanity; but our definition explains why a mental affection is at the same time spiritual and corporeal, and accounts for the excellence or decadence of our mental faculties according to general health, age, and education.

Reason and morality are terms much employed in courts of justice; medically, they imply the liberty of conscience and the sanity of its material instruments, in so far, at least, as these must not be entirely unfit for their functions. Activity, though it is the principal faculty leading to our duties towards God and humanity, and implied in morality, we hear little spoken of even at this moment, (October, 1861,) when school education is the subject of public advertisements; when we read in public papers discussions of the problem for educators to solve, namely: how properly to combine the true training of the intellectual faculties, and that of the moral sensibilities and physical powers. Not a word is said about teaching *how to act* in the most important circumstances of *public and private life*; which tuition is, nevertheless, the fundamental and most serious part of education.

We will see further, that the pathology of volition has been also forgotten, and sometimes denied; much more, volition, although being the proper basis of *legal philosophy*, has been little studied even by jurists. For our purpose,

Morality may be defined as the quality of justification of a man's conduct; on the contrary, immorality points to a want of regard for justice, with a knowledge of offending against written and moral laws; and this quality constitutes the malice of the offender. Now, a lunatic has no regard for justice, because his conscience is absent or darkened; and his malice, when he has employed any, is but the reflection of his anterior state of mind. Illustrations of this are very common, and of easy observation among insane persons.

When there is no free will or possibility of choice in actions, we are able to pronounce that volition is vitiated in its essence, both corporeal and spiritual; human activity no longer exists, and disappears with conscience. Now, the doctrines of ancient and modern philoso-

phers agree on the existence of an active principle of the soul. The Greeks admitted the *rovç*, but recognized at the same time the *θύμος* as an active power of the mind; thus volition has always been known to be a peculiar mental function, perhaps the most important of all, as having its origin in the great principle of spontaneity and activity.* It is clear that, in order to obey the laws of God and society, we must be able to *choose* between what is called right and wrong; for it is insufficient to know and distinguish good from evil, if our will cannot sanction and execute our judgment.

The difference between the sensitive and intellectual powers on one side, and volition on the other, is easy to detect. We are not responsible for our thoughts, feelings, or sensations; the most absurd ideas may form themselves in our imagination; we are not answerable for them; they concern only our understanding, and are, therefore, *subjective*; we reject them, and that is all; but it is not the same regarding our acts, formed entirely under a process similar to that of our ideas, but not identical; we are forcibly responsible for their result, because there is an *objective* relation that binds us to the external world, and imposes upon us moral obligations. We are responsible, first, when we are conscious or in possession of ourselves, ("*suicompōs*"); secondly, when the act is premeditated with a known and adequate motive, and when the result is foreseen; thirdly, when the act, after being judged good or bad, is resolved to be put in practice; and fourthly, when execution has accomplished the intended purpose.†

* There is some diversity of opinion on this subject. A few writers think that volition is only the result of an *increased desire*; that understanding and feelings may come to a state of activity or desire. It is on that account, says Dr. Flemming, in his excellent work, (*Pathologie und Therapie der Psychosen*, 1859,) that physiology has renounced to search for a particular organ of volition, but has tried to find the instruments transmitting the influxes of the two cerebral principles to the excito-motor system. He continues, page 33 of the same work, by the remark, that this later question remains without answer, because it appears that volition will not be recognized as a faculty of the human mind.

A great number of German, French, and English, and especially our late friend the celebrated Guislain, are of a different opinion. Dr. Baillarger maintains that "La volonté peut, à l'état sain, se saisir de nos capacités et nous faire méditer, puis la volonté exaltée peut conduire à l'extase, ou bien la volonté peut laisser errer, ou vagabonder notre intelligence et nous conduire à la rêverie." —*Annales Médico-Psychologiques*.

The recent theory of Mr. Bain, who attributes all our actions originally to chance, the pleasant being continued, and the useless rejected, appears inadmissible to us.

† The axiom of jurisprudence, (*in lege cornelia*.) "consilium enim unius ejus-

Without entering into metaphysical explanation on the origin of a diseased volition, independent of an apparently sound judgment, it will be clear that if the mind be diseased by exaltation, depression, or perversion of one or more of our faculties, the effect of that disease is to deprive us of our liberty of action.

An insane person says sometimes, "*I know I did wrong, but could not help it, because at the moment I was obliged to do it.*" Now that shows that some* process of volition, quite independent of the understanding, has been vitiated. In general, it may be said that there exists a *chasm or void* between intelligence and volition when morbid.

We think that four divisions might include all criminal acts and offences committed by the insane:

- 1st. Cases in which the lunatic is under a general delusion.
- 2d. Cases in which the insane person is rational on every subject but on his particular delusion.
- 3d. Cases in which the insane is devoid of either thought, feeling, or will.
- 4th. Cases in which the lunatic possesses his intellect, and knows his diseased state of mind, even to a moment before a sudden attack, or after the fit is over, when he gives account of his infirmity.

In the course of this essay the second and fourth divisions only are to be spoken of.†

The momentary loss of reason, or intellectual error, short of duration, has little or no effect on the mind; but when error is protracted,

que, non factum, puniendum est;—Dolus pro facto accipitur,” “l'intention est réputée pour le fait”—is not applicable here. An insane person has no will nor intention.

* Mr. Billod, in a memoir inserted in the 10th volume, page 23, of the Annales Médico-Psychologiques, gives the following analysis of volition:

“Trois ordres d'éléments constituent la volonté.

1er Ordre.—A, Génération de la volonté;

B, Génération des motifs;

C, Délibération;

D, Conséquence de la délibération ou détermination;

E, Aperception ou connaissance de la volonté.

2nd Ordre.—Vouloir (c'est à dire mettre en rapport le 1er avec le 3me ordre.)

3me Ordre.—Exécuter par telle ou telle faculté, par telle ou telle fonction.

† As to the first and third divisions, *maniacs* may, and very often do, act very improperly, in consequence of delusion, or sometimes of a too rapid succession of thoughts, that prevents them from knowing what they are about. *Demented* are generally perfect automatae—just as if everybody else but themselves had the power to direct their acts.

it may in certain cases trouble and pervert the intellectual power, the will, and instincts. Even when error, mania, or folly are imitated a long time, (sometimes night and day for months, by criminals,) the same result may overtake the miserable feigner. In these cases, error and vice have a morbid and material influence on the brain and nervous system, altered moral and physical symptoms are brought to light, and at last, insanity will declare itself. The difficulty, here, is to ascertain the transient period. In order to determine it, we should know the organism of the brain, the laws of its phenomena, and how the brain becomes incapable of its mental functions. Medico-psychological science has answered, as nearly as it is possible, some of these difficult questions, or recognized the impossibility of penetrating the mysteries of nature. At all events, physicians have thought that the best solution could only be given by medical and moral investigation; but in the course of things, it was found that a very learned and respectable body of men, who make pure philosophy and law their special object of study, have interfered, assuming that they knew better how to solve metaphysical difficulties relating to judicial matters on insanity. Now, if the study of the human frame has something to do with insanity, (and it is pretty clear it has,) lawyers and pure philosophers ought to resign their pretensions; but they are unwilling to do so, because, in common with laymen generally, they think insanity to be more a moral infirmity than a corporeal disease. In courts, lawyers often find fault with physicians, and give them to understand that they do not know the meaning and bearing of laws. Certainly, in its abstract notion, law must be considered perfect, and obeyed until amended or abolished on account of its deficiencies; but physicians are bound to show in what these laws oppose natural facts; and this has been done since a few years. Laws on insanity were made when insufficient knowledge and theoretical notions did not permit legislators to master their subject; and now, it is said, with severity, but with truth, that some of these laws are unjust; that they lead to the grossest mistakes, if not to judicial crimes. In no country that we know of, are legal means of ascertaining insanity adapted to the actual state of science. It is painful to say, nevertheless our duty to state the fact, that, in spite of the efforts of learned and renowned physicians, unhappy lunatics have suffered the penalty of death; nothing could avail against the absurd prejudices of public opinion, and the cruel, and sometimes shameless, interference of the daily press, when "*human justice was pursuing its course.*"

Among a great number of false notions prevailing both in Europe

and America, resulting partly from inappropriate laws, and partly from prejudice, ignorance, and want of practical familiarity with insanity, some are here noticed:

- 1st. That melancholy or hypomania, epilepsy, and diseased will, (diastrephia,) are not mentioned in any code of laws.
- 2d. The pretension of some courts that there should exist a *legal insanity*, to be determined without, or against, the opinion of physicians.
- 3d. The opinion held by jurists, that the mind, in its pure essence, is susceptible of a disease which the body need not share. (Some medical men entertain and support the same false notion.)
- 4th. That a dispossession of a faculty is no proof of insanity.
- 5th. That, notwithstanding an insane person committed a wrong act while laboring under the idea that he was redressing a supposed grievance or injury, or under the impression of obtaining some public or private benefit, he is liable to punishment.
- 6th. That a jury of laymen (not medical) should be allowed to decide the sanity or insanity of a person.
- 7th. That a jury of laymen is to decide whether a party had or had not a sufficient degree of reason to know that he was doing something wrong.
- 8th. That the presence of a delusion having no positive and clear connection with an alleged crime is no evidence of lunacy.
- 9th. That acts, considered in their nature, and their mode of execution, bear no character or sign of the existence of insanity.
- 10th. That eccentricity, imbecility, waywardness, are never signs of insanity.
- 11th. That monomania has no connection with mental disease.
- 12th. That monomania (if considered as a partial insanity) does not absolve the offender.
- 13th. That the state of insanity must be permanent to admit of irresponsibility.
- 14th. The terms employed in the French and Belgian codes of laws concerning the specification of insanity are defective, and insufficient in the actual state of science.*
- 15th. That moral insanity is not a mental disease.
- 16th. The neglect of physical symptoms in medical certificates for

* Dr. De Castelnau, in his recent work, *Rémarques Physiologiques et Légales sur l'Interdiction*, has shown that the French law concerning the interdiction of civil rights is contrary both to civilization and equity.

law purposes; want of appreciation of the necessity of their description (if they exist) in moral insanity and in simulation of a mental disease. (This error is common to jurists and medical men.)

We must confess there exists between medical men and lawyers a remarkable spirit of opposition; an infirmity which we should, perhaps, renounce first ourselves. Why it should be so, is difficult to say. But regarding the medical profession itself, we should also come to an understanding amongst ourselves, when there is some judicial and medical difficulty to solve, and never to enter the witness-box with a prejudiced mind in favor of the party who has called us in. Unhappily, men living by liberal professions are sometimes disposed, from motives of self-interest, to jealousy and mutual opposition; the effect of which, in courts of justice, must necessarily be, to throw distrust and ridicule on us. But what is worse for the administration of justice, is, that learned judges, ingenious barristers, and medical officers are very often at variance, because they do not admit the same definitions of terms, especially those of moral insanity. A confusion arises as well out of the different value given to words as out of the loose employment of general terms.

The consequences of such a state of things are often to be deplored; the jury not having understood the real state of the case, many judgments have been rendered for which the defendant, right or wrong, might as well have tossed up for the verdict.

One of the objects of the present paper is to try to dispel some obscurity concerning the *diagnosis of moral insanity*, including homicidal, suicidal, and impulsive mania and monomania, in which moral faculties are said to be affected.

What is the pathological meaning of moral insanity? Dr. Pritchard says that it is a disorder of which the symptoms are only displayed in the state of the feelings, affections, temper, and in the *habits and conduct* of the individual, or in the exercise of those mental faculties which are termed the *active* and moral power of the mind. This definition shows clearly that it principally concerns the faculty of *willing and choosing*. An eminent and celebrated American writer, Dr. Ray, adopts this definition; and Dr. Beck says, that besides the impulse to murder, there is also included an irresistible impulse to commit injury, or to do mischief of all kinds. Here, then, we have the full perversion of will and instincts well defined by writers whose authority is accepted everywhere. Drs. Bucknill and Tuke, in their excellent work on *Psychological Medicine*, certainly the best lately written in Europe, say, that the diagnosis of moral insanity is of the utmost importance,

and often of the utmost difficulty ; but they think that physical symptoms, standing by themselves, are of little importance in the diagnosis. This we cannot admit, and will endeavor to prove the necessity of their presence both in moral insanity and in the simulation thereof, for the diagnosis of the real nature of the case.

Recent analysis of the functions of the mind has shown that its several operations can be divided into five faculties : 1st. Sensation. 2d. Moral feeling or emotion, (both of the receptive order.) 3d. Intellectual power. 4th. Volition, (the only faculty according to the signification of the word;) and 5th. The natural instincts. The three last belong to human activity ; it has been found, also, that any trouble, exaltation, depression, abolition, or perversion of any of our mental functions, when accompanied (as always is the case, more or less, evidently,) with physical symptoms, was sufficient as good evidence before courts of justice. In fact, the study of psychologico-forensic medicine and its progress are, in a certain measure, the result of several cases of moral insanity which attracted great notoriety. The perusal of those trials is of the greatest importance for our studies. It may be seen that a great number of the accused were in a very extraordinary mental condition; the *unity* of their mind being in a certain measure destroyed, since they were in a struggle, trying to collect their ideas and feelings in order to master wild impulses ! In almost each trial, in which moral insanity is the plea of defence, the prosecution maintains that such a disease does not exist, and brings forth examples and books to sustain this assertion: Lawyers not being able to distinguish the disease by its morbid symptoms, pretend that criminals are more or less *morally insane—id est*, wicked, dissolute, and perverted. On the other side, the defence has often resorted to this plea of insanity as a remaining chance of acquittal; some physicians, moved by a desire to wrest from the scaffold some prisoners that appeared to them more deprived of reason than malicious and wicked, have gone too far in their so-called philanthropic endeavor. The measure we propose, further on, with regard to medical reports on lunatics, would at once do away with such an autocratic power, against which the reaction of lawyers and courts is partly directed; but there are other causes of misunderstanding to be explained.

Some people understand by the word moral the opposite of physical; others rank moral insanity as the extreme of moral perversity; again, moral insanity is said to be an obliquity of mental perception as to the precise boundary of what is honest; some eminent writers speak of mental dynamics and of moral functions being solely affect-

ed. All these expressions may appear obscure, and at last the consequence of a want of precision in the diagnosis itself of these diseases has been, perhaps, the acquittal of a few offenders, but unhappily more often the condemnation and execution, as guilty criminals, of persons actually insane!

The fact of real insanity detected in acts and instincts, connected or not with other symptoms of mental disease, is admitted by all authors on psychological medicine. Unhappily, they have not insisted on its diagnosis by medical means, but have resorted to psychical symptoms generally; though they alluded sometimes, it is true, to pathological anatomy, when the state of that science permitted it. Now pathognomonic signs are not so difficult to discover as to have ever to be overlooked; we have had, in common with many physicians, occasions to trace them in numerous cases; and every medical officer connected with establishments for the insane recognizes the disease, whatever be the name under which it may be presented to him by persons who do not know its symptoms. I shall submit these pathognomonic signs.

I believe that there is no court in the world that has not had cases of moral insanity to try. What has happened? When physicians did venture to explain the special nature of those cases, they were almost each time mystified; scientific explanation was often quibbled, or dissected with metaphysical subtlety, but always resisted; and the *savant*, that tried to preach to a skeptical audience, was laughed at, if not rudely turned out of the forum. It may be read in Dr. Winslow's Journal of Psychological Medicine, that in a court of justice of England the late Lord Campbell said to three physicians, "*You may go home to your patients, and be more usefully employed there than you have been here!*" Another judge said to a physician, "*You might as well have staid at home and attended your patients!*" Another learned judge said, "*that his experience taught him there were very few cases of insanity in which any good came from the examination of medical witnesses!! their evidence sometimes adorned a case, and gave rise to very agreeable and interesting scientific discussions; but, after all, it had little or no weight with a jury!*" These curious opinions, given by learned judges, sitting on their benches of justice, confirm what we said about the pretensions of jurists on medical subjects; but it is to be hoped the time will come when such words will never more be heard falling from judges, for the honor of magistracy at least! And now, we regret that sometimes misunderstandings should exist between learned men, who, in the name of justice, come together to vindicate truth.

In spite of many discussions, held in medical societies and academies, doubts concerning the theory of moral insanity, for legal purposes, have not yet been resolved. The reason of it may lie in the fact that if people consider moral insanity from the point of view of its flagrant attacks and of its terrible results on society; if, at the same time, the criterion of knowing right from wrong has been employed as a test, then the logical inference is, that such acts must be repressed and their perpetrators punished. But, on the other side, if physical and psychical symptoms agree in demonstrating a disease of the brain, then it must be evident to courts, juries, and lawyers, that the offender, at the moment he committed crime, had no power to control his will, nor to choose right from wrong; that he was insane, because he could not dominate a morbid impulse, or that he was not able to adequate his actions to a real motive. As for us, we consider such an offender, under the influence of mental ailment, as insane as the most demented of his fellow-sufferers! Another reason, warring against the admission of its existence, may be the sort of causation producing moral insanity. Physical and vital causes are admitted, but in the case of a pure moral causation the link with physical change is not so easily detected.

Some very learned alienists, too, do not admit these explanations relating to moral insanity. Dr. Delasiauve, the distinguished physician of Bicêtre, says that monomania is a disease of the *sentimental* order, in which feelings, affections, and instincts are diseased. Now, here human volition is completely forgotten, although a great function of our conscience; and that mistake appears to be owing to the idea that volition yields more easily to feeling and emotion than to judgment, with which it should have less affinity.

The fact of the words *moral* and *insanity* being joined together, is also sometimes the cause of another mistake, since the act of an insane person may be immoral, and have no relation to his moral feelings or affections.

Aberration of feelings, emotions, and understanding is only incidental in cases of monomania with reference to mad acts; hence all the inconvenient names of *moral insanity*, *mania sine delirio*, *impulsive insanity*, *manie raisonnante*, *folie morale*, *Gemüthskrankheit*, and a variety of other appellations, as *dipsomania*, *pyromania*, *kleptomania*, etc., etc.

The confusion resulting from a pure psychological misunderstanding has had an influence on the opinion of jurists; they doubted first the real morbid state of the offender, and were unwilling to declare

irresponsible the lunatics that were neither idiots, maniacs, nor demented. Unfortunately, Dr. Delasianve in some measure supported their views on partial insanity; he said, in the conclusion of a memoir read before the celebrated Medico-Psychological Society of Paris, that "partial delirium and passions cannot be mistaken one for another, on account of the morbid line that separates them; that the insane are not responsible when delusion is evident; that also a presumed criminal is not responsible when his mono-delirium, although limited, is the motive of his crime; but when, on the contrary, the motive of the act *does not relate to* his peculiar delusion, that it remains to the judges to appreciate in what degree the influence of a *partial delusion* may diminish his responsibility." Here, then, the unity and solidarity of the mind is at stake, and the appreciation of soundness or unsoundness of a person is left to the arbitrary opinion of a judge—a man unacquainted with the numerous forms of insanity. Now, Esquirol said that the difference to be found in a mad-house and the world was only in a more accentuated shade of mad ideas, errors and passions, or propensities; metaphysical science finds also no line that separates reason from madness. The celebrated Lelut—member of the French Institute—says, in a memoir on insanity, "that in its beginning, insanity is still reason, as reason is already madness! That mental predisposition, which may be organical cause of insanity, consists (for the *moral or sentimental sphere*) in excessive irritability and sensibility; then appear strange desires, *perverted inclinations* and tendencies, bad passions, &c., (for the *intellectual sphere*;) they consist in want of attention, which leads to absence of mind, giving to the person an appearance of insensibility to external impressions; then a vicious association of feelings; ideas produce irregularity and discrepancies in words and phrases; or a too rapid association of ideas brings on confusion of speech, incoherence and unintelligible ellipses of thought; at last the symptoms of madness show themselves in false judgments, leading to wrong opinions, *determinations and acts* opposed to social order and morality." Well, if there is no psychical demarcation between reason and madness, why not have recourse to the physical one? It is admitted that it is necessary to compare the actual state of the individual to his previous state of mind and body, in order to appreciate the quantity or degree of existing differences; but if that person was a little eccentric, would not serious difficulties arise, unless physical symptoms could be ascertained? Every one may understand that, under such circumstances, lawyers tried to exclude physicians when cases could not be easily ascertained. "What,"

said an attorney for the crown, "a so-called monomaniac pleads guilty; he knows what he has done; he was aware of the penalty that his crime deserves; he knows even the law which forbids such an action, and now medical men come here pretending that such a man is not guilty!" The answer is this: If it is proved by the history of the case that there was no adequate motive; that the perpetrator of the crime was not in possession of his free-will; that an impulse forced him to the action; if anamnestic evidence is in his favor; if physical signs of insanity do exist—we say, that man being of unsound mind, no penal law can be applied to him; but it is your right to employ any means, consonant with civilization, that you judge to be the best to prevent any future accidents or hurt to anybody from his disease.*

Many jurists, and Dr. Delasiauve, ask these questions: What is free-will? Where are its limits? Can a man master his volition while he is in a violent passion? In similar cases, if he loses his free-will, is that man, according to the notions of alienists, accountable for his crime?

We are, we think, able decidedly to answer all such questions.

First, it is quite useless to search for an explanation of the *nature* of free-will in the condition that it has pleased God to place us on earth; moreover, this has nothing to do with insanity. We think human liberty or free-will may be considered as a moral power that man may acquire, by means of the principles laid down in his conscience, so as to free his mind of its material conditions; certainly that power is acquired *unequally*, and each of us does not reach the same degree of freedom. Some, under painful circumstances, remain subjects to necessity and its material laws; others, favored by education and special gifts, become more autonomic, that is, less subject to passivity, though never completely free. Thus free-will is never an absolute power, and has not the limits asked for; that is the reason why, according to circumstances, men, entirely sane in their mind, are more or less responsible before the laws; but again, this has nothing to do with insanity. Free-will cannot have any degree of perfection or imperfection in a madman, because his very state excludes the possibility of raising or entertaining that moral power. How can you require the application of a thing, the source of which is extinct? Why, it is that very material condition (in its worst failure) that deprives him of the means of enjoying liberty.

* In our opinion, such a person, even cured, ought never to be left free from the control of somebody, able to judge of his mental state.

Now passion, hatred, anger, animal and selfish inclinations, &c., do not in the least destroy our liberty and volition. Instantaneous madness may happen, but it is very rare; in these cases latent symptoms have not been observed—that is all. Decision has always, in one form or another, preceded action, and our conscience has approved or rejected our motives; this is so true, that criminals have confessed to have been obliged to get themselves under the influence of liquor, to be enabled to carry out their plans. In this case drunkenness is no more an excuse than passion could be; and will never be considered as an excuse, because free-will was purposely diminished or oppressed!

In insanity free-will no longer exists, on account of a material condition of the mind, and therefore good sense requires that such a condition should be ascertained medically; the argument of lawyers, that some monomaniacs have more or less liberty, for which reason they may be compared with criminals, is the greatest possible error. Physicians have often been asked, with a certain victorious air, if they had studied criminality or observed criminals. Some, not knowing the bearing of the question, answered, perhaps, from fear to be entangled in some metaphysical net, *We have not!* but it might have been said that there exists no affinity whatever between criminals and the insane; the question is *to be or not to be*—is insanity present, or is it not? Certainly criminals are liable to become insane, and idiots and imbeciles are often met with in prisons, but as far as conscience is concerned they cannot be compared. Taking, for instance, the case that may have an apparent relation with crime—that in which a lunatic knows his disease and regrets what he has committed—the intermittent nature of his attacks, their symptoms, the torture it causes to the mind, are evident proofs of the pathological state of the nervous system; in a word, all phenomena of the mind correspond to physiological facts, and these must be necessarily either normal or pathological.

In order to obviate some of these difficulties, we have proposed to give a particular name to that type of mental diseases which manifests itself in acts and general conduct.* I have named *Diastrephia* any morbid alteration of human will and instinct; the word is taken from *διαστρεφίω*, to pervert, because perversion is the most common alteration of volition.

In our estimation, *Diastrephia* has the same relation to an act that

* Des Diastrephies de la Volonté et des Instincts au point de vue Criminel. Par le Dr. J. Parigot, Professor à l'Université de Bruxelles, Médecin en Chef et Inspecteur de l'Establishissement d'Aliénés à Gheel. Bruxelles, 1856.

delusion has to a thought; they are two equal terms, indicating the error and guile of an insane person; but the first is much more important and prejudicial than the second, which concerns only our individuality. There is an obvious reason why the terms of such a sort of algebraic equation cannot be inverted; it is, that logic and grammar do not permit to express the delusion or delirium of an act meaning its folly or insanity. Diastrephia is a special perversion, only applicable to volition and instincts. By this distinction authors on pathology are able to classify that sort of infirmity.

From this point of view, insanity, considered in its true objective relation, furnishes us with a definition that meets better any form of insanity for forensic practice. It is no more to be said to be a total or partial deprivation of the power of reasoning and of distinguishing right from wrong, nor is the general character of insanity any longer an emotional trouble, as the celebrated Guislain called it; neither can it be said to be a disease of our perceptive faculties, with subsequent loss of judgment. All these phenomena are characteristics of certain orders of disease, but not applicable to all cases, and especially to those requiring forensic discussion. For law purposes, insanity might be defined *the loss of power of control either over one or more of our mental faculties, including especially the absence of free-will, demonstrated by moral and physiological symptoms.*

In a medical point of view, it is *an idiopathic or sympathetic disease of the brain, which interferes with the psychological and physiological functions of this organ.* From the standpoint of administrative authority that has charge of preserving the peace and security of cities, towns, or villages, *insanity begins only when a patient endangers the community or his own life and property.**

We have not the slightest pretension to present a complete definition, since every one must fail to determine the nature of insanity. It has been tried to essentialize disease, but we must content ourselves to see the mean point where material and spiritual phenomena seem to oscillate; dynamic theories never will help us out of the obscurity. Considering these mixed phenomena, what we are certain of is, that if vitality confines itself to the conservation of individuals and species, if to attain this object nature employs sometimes brutal force and vio-

* A patient, although not dangerous to anybody, must, for his own sake, that is, to be cured, either be placed in an asylum or in a free-air establishment. I have seen cases in which sympathy or consanguinity have been the cause of a sort of contagion of insanity in families.

lence, we know also that intellectual life, by a contrary law to fatalism, tends to enlarge our animal affinities and to generalize the egotistical principle of our existence, by applying the rules concerning individualism to a larger circle of our fellow-creatures; and thus mind in its natural expansion becomes more free and apt to love and do charity, and finally it enables us to enter regions of spiritual life entirely unknown and imperceptible to our natural and material senses. *Fatality, brutal force, and slavery must give way to intelligence, charity, and liberty!*

From this I conclude that mutual reactions do exist between *soul, life, and matter*, and that it is in these reactions that we must look for the proper means to ameliorate our dispositions, and to cure our moral and physical diseases.

Everybody thinks that he is able to judge of the sanity of another person; people say *that man is crazy*, just as they would say, seeing a man falling from a certain height, *that must be a surgical case!* but is that vulgar appreciation sufficient for forensic and scientific purposes? Are simple affirmations of two medical men, or certificates saying only that a person is of unsound mind, sufficient to deprive a citizen of his liberty and property? Certainly not.

There is no doubt that, if mental lesions had always been accurately described, if physicians had not contented themselves, and magistrates been satisfied with, a few lines assuming, *ex virtute officii*, that a man was insane, without joining a full description of the symptoms observed, many errors, injustices, and miseries would have been spared.

We consider the office of a physician in courts of justice of a very high character and value. When he gives his opinions relating to life and liberty, is he not a magistrate of the highest order? The importance of his office elevates his soul and mind above all private interest; are we not real judges when we must decide between the prosecution and the defence? Certainly physicians are fallible; who is perfect? But they are certainly the most able to ascertain the truth in all difficult cases of the kind under consideration.

Medical witnesses or experts must, however, be very cautious; a physician before a court may explain the general ground of his conviction, but we think he is not called to lecture on medicine; therefore theories must be avoided; there is no time, nor is it the proper place, to discuss them. He must remember that every one of his words will be dissected by one or the other party, and therefore say what he means without superabundant words, or any intent of oratorical effect.

Now, supposing a judicial case in which immorality should have been the efficient cause of a mental disease, vice should have taken a morbid existence; the prosecution says that it is clear that the man is immoral, and is only trying to escape punishment; public opinion is against the plea of insanity, as being fallacious: here the physician will be the only one unprejudiced, and in spite of all influence, relying only on the unequivocal signs of material disease in connection with psychical symptoms, he settles the case to the satisfaction only of his conscience. Sudden violent and ungovernable passions are not symptomatic of diastrephia—*nemo repente furiosus*; it requires a certain time before passions or habits can inflict on us either a derangement of functions or a change in our tissues; the power, also, of unbridled organic propensities is of long and gradual effect on our mind. Again, after a long morbid reaction, error, ignorance, and vice may turn monomaniacal conceptions and affect our will, and consequently our doings; then comes the question, When does passion or vice make us insane? Where is the line or boundary of sanity consistent with these causes of disease? Certainly there is for any one of us a line or moral boundary we ought never to pass; every man must be careful of his weak side; and education should have for one of its objects to fortify our will in order to make up for *gifts* in which we may be wanting. Not only is this true, but the brain must be gradually trained to certain exercises: for instance, let us suppose that a man of ordinary abilities would, from the plough, begin and assiduously prosecute high and profound studies; he will first feel premonitory symptoms of overexertion and fatigue of his intellectual powers; but if he continues his foolish task, he will, perhaps very soon, say that some light from heaven has enlightened his spirit, and the man turns a perfect maniac. The so bitterly criticised theory of the celebrated alienist, Dr. Moreau, who pretends that madness depends on an over-activity of the brain, is justified in this case; and when he advances that if vital force accumulates in one of our organs, one of the results must be either a greater energy in its function, as an aberration and a malady, that learned physician is certainly right. It is in this case only that Dr. Moreau sees an affinity between genius and madness. His antagonist, M. Flourens, is a bad judge of the value of psychological works, since the learned perpetual secretary of the Institute has himself proved in a little compilation of his, entitled *Essai Physiologique sur la Folie*, that he did not pay much attention to that special subject.

Who has not felt, when struck by affliction, that insanity was near? It is not so difficult to find the limits of the power of our understanding

and feelings, but in judicial cases, to say positively whether that line is passed or not, requires the evidence of material signs. We have spoken of overexertion of the intelligence, but the same may happen with emotional sensibility; nervous persons must oppose as much as possible strong emotions and their effects, by keeping from all indulgence in affections or tender feelings, or from sights that might excite them. Again, knowing the nature of our will, when we are conscious of being irascible and prompt to rash determination, we are bound to check these propensities; if we do not, we put ourselves *voluntarily* in the predicament of a man that willfully intoxicates himself. None of us is doomed to fatality; necessity and autonomy are the result of our double nature; and according to our views, spontaneity always surpasses our instincts, conscience being a lever with which we may overcome the greatest difficulties; irresistibility is only the doom of *Diastrephia*, of which disease we shall proceed now to present the principal symptoms, both psychical and physical.

This paper having for its object to find a practical means of diagnosis for mental ailment, the writer thinks it not necessary to discuss whether the physical symptoms hereafter described have or have not a constant and exclusive relation with diastrephia. Inattentive observers will perhaps maintain that some instances of mental disease, and especially of moral insanity, are destitute of any physical symptoms. In numerous cases in which some alienists thought, and for a time maintained, that insanity left no trace in the brain, the microscope has shown that they committed an error. Indeed, presumption alone can insist that in the cases alluded to a function may be disordered and its organism undisturbed. Proof is out of the question, while simple logic shows that the recognition of such a state amounts to an impossibility. If here mere speculation be taken for granted, and scientific revelation be denied, diastrephic cases must of course forever remain subjects of interminable and useless discussion between philosophers, lawyers, and physicians!

As insanity cannot exist without a certain form of disease, nor bodily health at the same time with madness, moral insanity, or diastrephia, being a disease of body and mind, must present several phases or stadia, as all infirmities do. The following description is a sketch of the general and special pathology of diastrephia.

Patients generally are quite different in manners, habits, ideas, language, and feelings to what they were before, or their bad habits, customs, or indulgences are more frequent, and become notorious. After a certain time elapses, after these, the premonitory symptoms,

patients are incapable of serious occupations; their will is impaired, instincts are perverted, and their power of control is lost; then appear sudden and irresistible impulses, unaccountable eccentricities and whims, desire of change, and sometimes delusions, or mono-delirium. It has been noticed that some take pleasure in telling untruths, and in deceiving people, when otherwise they were not loquacious; others are remarkable for their hardness of heart and selfishness. Some become maniacs, but oftener a profound melancholy is about them; then the disease assumes a character of deeper intensity; a profound immorality is often accompanied with consciousness of a propensity to crime; indifference or sometimes delight of doing evil; peculiar and strange mode of committing crime; ready admission of facts, however scandalous or horrible they may be; absence of grief and remorse. In all these cases, letters, memoirs, and other pieces of composition are of the greatest value to ascertain the state of the mind of the writers; their complaints are often of a delusive character.

Diastrephia may also run a milder course, and appear only in fits, variable in their remittency, intermittency, or periodicity; some patients have them coming on every month; I have seen one who remained sometimes one year free from attacks. During their lucid intervals they show almost no sign of insanity. Dipsomaniacs employ, then, much art in preventing people from remonstrating; for instance, they will feel offended, being a gentleman or gentlewoman, by being told that they were found dead drunk, etc. Some regret what they have done, and beg to be taken care of when their attack is coming.

No physician of our days denies the solidarity of *innervation, sanguification, and nutrition*. In man, those functions have a still greater importance in regard to the functions of the brain; any long process of *enervation* will operate a change in our organism, just as any deviation of nutrition will produce a morbid diathesis. Now, is it possible that a psychical lesion can exist without corresponding symptoms or morbid reaction? It is impossible; and is it not, then, self-evident that diastrephic cases might remain subjects of interminable discussions between philosophers and jurists, if the physicians came not forward to solve their doubts?

Our conviction on this important subject may, perhaps, make us appear to overrate the value of physical symptoms; but we must declare that it is *their coexistence* with mental aberration that gives them the advantages we have found in tracing them. The rules we insist upon must be applied, not only in diastrephia, but also in cases of simulation of insanity. Let the part of a feigner be played as well

as possible, emotions would be difficult, but somatical symptoms will be impossible, to imitate; even supposing that a simulator could long impose upon a skillful alienist, the result would probably be—real insanity. This is a curious and forgotten form of insanity, of which I intend to speak at length on some future occasion, wishing only for the present to state that its occurrence is the strongest proof of the power and influence of ideas and will on structure.

Amongst the physiological signs of diastrephia, one of the most important is the existence of a morbid action on the brain, produced by either a moral or physical cause. Of course, the brain being the principal seat of a material disorder, pain is reported by the patient to exist in different parts of the head. Other infallible symptoms depend upon the reaction of the diseased brain on the body; the outward characters of which are similar to that of organic pathological disorders; they present various features, the *ensemble* of which strikes, at first sight, a practical observer.

According to the excellent observations of Dr. Billod,* there exists sometimes a curious interruption of the power of volition on the muscular system. In spite of the patient, his limbs will not obey his purposes; the functions of the cerebro-spinal system may be also altered; hence pain in the limbs, muscular tremor, involuntary contractions, spasm of voluntary muscles, and several neuroses, called *proteiformes* by Dr. Cerise. The functions of the sympathetic nerve are also troubled; irregular innervation of arteries and veins producing latent disorders; irregular visceral and capillar circulation affecting the nutrition. Patients are emaciated; they feel a general heaviness over the whole body; their complexion is sallow; their skin harsh; sometimes they are feverish; the heat is increased; the pulse frequent; the tongue is furred, and the bowels permanently confined; sleep is impaired; they have almost no rest at all, nights; in cases connected with melancholia, there is a deficient sensibility of the peripheral ramification of nerves, producing anaesthesia.

Generally, there is an expression of pain in the features and appearance; the physiognomy is dull, and devoid in expression of kind feelings; it shows rather indifference or selfishness; the face is generally pallid; the stare is not vacant, but uncertain; sometimes the eye wanders about; tremulous movement of both eyes when the patient fixes them on any one; there is sometimes squinting; the pupils may be irregularly contracted; when there is irritation, the pupil is contracted; in

* *Annales Médico-Psychologiques*, vol. X., 1847, pages 15, 170, 317.

congestion, without irritation, it is *dilated*; in many cases there is a peculiar look, indicating shrewdness and a disposition to mischief. Patients are often occupied by an absorbing thought or passion; sometimes they announce strange desires and perverted appetites; in this case they keep alone as much as possible; generally their movements are sudden and quick, without aim; sometimes they will move round in a room with head and body bent downward, until some rash determination makes them suddenly change their position.

In diastrephia, the digestive functions are almost always out of order. Gastralgie pains and a voracious appetite are often to be met in the same person; dyspepsia augments their sufferings. In females, uterine affections may be the source of the moral disturbances. Complications may arise from essential local diseases, as gout and rheumatism. Some patients, of a neuropathic disposition, are perfect hypochondriacs, with hallucinations or perversion of feelings and instincts. Some, in spite of a suicidal propensity, are always occupied with anxiety about their health; they ask continually for medicines, and are afraid of doing something wrong concerning their bodily well-being. It may also be found that patients, although suffering, pretend to be very well; they despair of their reason only, and it preys on them night and day; their rest is short, and they get up in the morning unrefreshed; some wake during the night, ask for relief, or want to converse with somebody, in order to avoid terrific images.

When patients are interrogated on the motive of their conduct, or why they committed certain deeds, some cannot account for them; some say it was an impulse, a powerful desire, and so forth.* Some parties answer all questions with much accuracy and adroitness; generally they are exceedingly cunning in avoiding much explanation. Nothing can be found in others that betrays an affection of the mind, although suddenly overtaken by fits of phrensy. Some ask to be secured or taken care of, lest they would commit a crime. We have seen one that wanted to be under the guard of somebody, even if it should be a child. In the free-air establishment of Gheel, many cases proved the singular influence of continual moral restraint. A man who had resided in the village of Gheel, in the family of a peasant, never committed

* Diastrephia being a primary affection of our will, I do not call by that name the disease of the insane person who says, "*I heard a voice saying, Murder that man!*" or, "*Throw thyself from the window!*" This is hallucination. Nor is the name applicable in the cases of insane persons who refuse to eat, to dress, &c.; their will is not primarily vitiated, but their judgment.

the slightest offence, although under the influence of diastrephia in its worst form. I often visited him, and found the lunatic alone in the house, or sometimes under the guard of the children, the parents being at work in adjoining fields. Some people of his birth-place having reported to the burgomaster of his village that he (the patient) was cured, because they could not find any insanity in his *talking*, a medical report was required, and notwithstanding its conclusion, the administrative authority of his village set him at liberty. A few months after his return home, the man, let loose to his propensities, killed his wife, *in order to cook her feet*; and being disturbed in his horrible meal, he killed also the man that had accidentally called at his house and disturbed him. It is certainly a remarkable fact that, in the free-air system, insane people are almost entirely trusted to themselves, but that they are less tempted to yield to morbid impulses, on account of a sort of moral restraint that calls for their own reaction against bad impulses; in a population of more than a thousand free lunatics, the proportion of diastrephical cases is sufficient to prove the efficacy of the system.

When sudden attacks come on, the physiognomy of those patients takes a different aspect, under the influence of cerebral congestion: the face is colored, flushed; the language violent, and sometimes unintelligible; the gesture denotes great exaltation; when the crisis is over, they resume their former, generally sullen, appearance. Some authors have reported that lunatics in this case experienced a sensation of burning in some part of the body, that spreads over by degrees, and arriving at the brain, caused a momentaneous furor, something like that in epileptic fits; there is, no doubt, a great analogy between these two lesions. A young man who during eight years had suffered from epileptic fits, was since two years free from them, but had, instead, become subject to fits of diastrephia; then he wanted to kill somebody. Before his attacks, he often cried "Dear mother! be off, or I must kill you." The attack being over, he would say, "Now you may untie me. Ah! I have suffered much, but I am happy that I did not do any harm."*

* The state of an epileptic after the fit is over is well known to practitioners. Furor and hallucination are sometimes present for several days; but what is very remarkable, and very much like cases of diastrephia, is the spirit of aggression, spontaneously manifested, even towards persons for whom they have affection. Several physicians connected with asylums have been victims of the spontaneous furor of epileptics. The celebrated case in the annals of crime, that for which Count Bocarmé was executed, offers the curious coincidence, that it was

Diastrephia ends generally in dementia and general paralysis, the symptoms of which run very often into each other; the likelihood of cure depends on the early attendance.

Such are the symptoms we have been able to observe in one of the largest asylums of Europe, during seven years.

All the cases cited in Drs. Bucknill and Tuke's Manual, from page 178 to 220, under the head of *Emotional Insanity*, are pure diastrophic cases, with exception of an emotional disease, erotomania. We observe that the authors do not share Ray's and Hoffbauer's opinions respecting the diseases of feelings and their effect on volition, which opinions they call *unqualified assertions*. They suppose that if there ever be, congenitally, a condition of the *moral sense* analogous to imbecility, it is impossible to apply it as a test to later acquired mental disease. The difficulty of *moral idiocy* is soon laid aside, when the real disease of volition is recognized in diastrephia. Moral idiocy or insanity are scientific puns.

The symptoms of diastrephia require time and leisure to be observed. It is not to be expected that a physician, suddenly called into a court of justice, would be able always to ascertain their existence on a first examination. Days and months may be necessary for such an important object. The only and best mode to study out a medico-legal difficulty of this nature is to have the so-called insane person sent to an asylum. Unhappily, such is not always the course taken in Continental Europe; judges and attorneys for the crown have their own medical officers, who, generally, have no practical knowledge of insanity. On the other hand, the defence of a committed offender tries to find physicians who will do their best for the defendant; each party, sometimes after a few visits to the jail, comes to fight a battle of words before the jury, and on that field truth and justice are often sacrificed. It would seem that many of the difficulties might be avoided by the selection of a medical jury or board, who should report on these cases; if pathognomonic signs of insanity were not sufficiently evident, that board would so state the case, and the accused might be sent before a court's jury, whose good sense generally decides for the best of the public interest. If the jury reported *insanity*, the patient should at once, by king's or people's authority, be confined in an asylum; and when cured, or believed to be so, he might be allowed to

after he had been *cured* of epilepsy that his perverted mind employed all its energy to discover *nicotine*. Several circumstances of his trial might lead us also to presume diastrephia.

live in a free-air, or otherwise less restricted institution, but not left without some surveillance, lest a new attack should come on.

To prove the propriety of the institution of such a medical board *de inquirendo lunatico*, let us cite an instance. It has been seen that kleptomania, although practiced by rich people, is not always a real case of diastrephia; moral depravity may have not yet effected the change of structure that constitutes a real disease. But let us take the case in which moral insanity was, nevertheless, pleaded on the ground that there was no adequate motive for rich people to resort to stealing. Now, a board of medical men, knowing that the desire to accumulate property by *all and any means* may exist, and finding no symptoms of a diseased brain, would, by committing the offender to exposure and punishment, soon put a stop to shop-lifting in the higher classes. We have here in our favor the authority of Dr. Bucknill, who says that, "in order to substantiate the existence of moral insanity, *precious** disease affecting the brain, followed by change of dispositions, ought to be satisfactorily proved."

The same difficulty of ascertaining the degree of mental capacity of *imbeciles* often exists in civil and criminal actions. Simplicity of mind, as the first degree of idiocy, is sometimes difficult to distinguish from mental weakness or dull understanding. But real simpletons, idiots unable to be left to themselves in society, do not understand the complex notions of social life, and their bodily frame presents a general condition of malformation and weakness; nothing but a sort of stoppage of bodily and spiritual evolutions can explain their case, in which, again, physical signs will be the best means of ascertaining it.

The necessity of a rule by which medical officers should be under the obligation to specify the existence of the moral and physical signs of insanity in their *affidavits*, is easy to be proved. The difficulties arising from summary legal reports, and the dangers resulting from it to individual liberty and property, are evident. In civil law-suits concerning the suspension of civil rights, the validity of wills, etc., it is sometimes necessary to have recourse to medical certificates of an anterior and past period of life of a person; if those certificates are defective on account of a want of a full description of symptoms, and only contain general statements instead of pathological facts, the fortune and liberty of persons are at the mercy of the ablest barrister. In a criminal prosecution it is necessary to know whether, at the time of the commission of the act, real symptoms of insanity existed;

* It ought to be *actual*—still better.

sometimes also proofs may be found in certificates showing that an old or chronic disease has existed, or that some of the parents or ancestors of the accused party were also insane. We have never seen a case of insanity in which the physical signs and intellectual symptoms of aberration of mind were equally wanting, so that we believe that there is no excuse for summary or general statements of insanity based only on a doctor's privilege.

How is it possible for jurists to form an opinion on the value of our diagnosis of insanity, when, in default of scientific description, we invent names for each case that may present itself before courts—as, *mania criminosa, lacerans, errabunda, sylvestris, saltans, furibunda, rebellis, pyromania, kleptomania, dipsomania, drapetomania, pseudomania, fanaticomania, etc., etc.**

Now comes the difficulty, moreover, of the mono and poly-mania. The supporters of the theory of the independence of each faculty consider the mind as a compound of attributes, any one of which may be disordered separately; their opponents say that mind is a whole, and cannot, therefore, be divided or deranged in one part, *i. e.*, unless the whole is involved. There may be a prominent morbid idea in the same way that a peculiar aberration of the will may exist, but only as a symptom of a general disease. Now, what advantages may contending lawyers not take out of conflicting theories? Some physicians, on examining a man for whom insanity is plead, overlooking the faculty of volition, might declare an insane man perfectly sane. The supporters of the theory of oneness of mental faculties will declare unsound the same individual that the supporters of monomania would declare liable to be punished, because his offence had no relation to his special delusion! Dr. Falret said to the Academy of Medicine of Paris, that he defied any one to show him a single case of monomania without a general disease of mind and body; he went on asserting that the supporters of the monomania theory did certainly not know the means by which that disease could be ascertained. It is certainly true that diastrephia may exist in its incipient stage without having much deranged the general functions, and remained unnoticed by the friends of the patient; of course, meanwhile accidents may happen.

* We cannot resist here to quote the severe but deserved criticism to be found in a recent work on Malpractice and Medical Evidence, by J. J. Elwell, M.D., Member of the Cleveland Bar, (New York and Cleveland, Ohio, 1860.) "There indeed seems to be a name for every conceivable kind of mania except that of maniacal classification, or insane nomenclature."

Speaking of analogous cases, Dr. Max relates that on one occasion a French judge said to him, "*If monomania be a disease, it ought, when it proceeds to capital crimes, to be cured in the Place de Grèves, i. e., by the guillotine.*" This cruel proposition, although repugnant, has something of truth in it; not as to the punishment inflicted on patients, but as to the necessity of repression of those crimes by a moral and religious education; by teaching young people first to obey and afterwards to command, especially their passions or desires; by stimulating our activity towards good. If repressive action be necessary, by prompt exposure of delinquencies leading to crime, by a repulsion of what is vicious, especially *psychopathia sexualis* in young people, and drunkenness in all classes; and last, not least, by an early attendance to premonitory symptoms of diastrephia.

There is no doubt that the plea of monomania has been an expedient to screen criminals, and that it has been carried sometimes to a ridiculous assumption. Eccentricity has sometimes been also a means of falsely arguing the charge of insanity against persons, with a design to deprive them of their fortune; it is true such crimes are rare. Eccentricity in many cases is only a form of spontaneity and freedom of mind, and therefore, by the scientific and experienced physician, easily to be distinguished from real symptoms of insanity. In countries where the sphere of activity is enlarged by public freedom and private energy, this distinction is very necessary; but here also diseases of volition must be more common. Dr. Woodward, of Massachusetts, observed that *one-fourth*, at least, of the lunatics committed as such belonged strictly to the class whose disorder was moral insanity.

Generally, in the beginning of mental derangement, some monomaniacal propensity may be remarked without the presence of prominent symptoms. The eminent writer and alienist, Dr. Forbes Winslow, in his last work on *Obscure Diseases of the Brain and Mind*, well points out the premonitory symptoms and the manner in which insanity steals upon the constitution. "This is precisely the time," he adds, "when medical aid is the most capable of being beneficial; but unfortunately the golden opportunity is too often neglected; diseased action is allowed to proceed unchecked until diseased organization has taken place, and the patient has become incurable."

In the premonitory stage of diastrephia, medical assistance will be of the greatest effect; therefore it becomes the general practitioners to prevent its further progress in the families where it may appear. When the disease is allowed to go on for a certain time, it becomes incurable, while in its beginning a medication appropriated to the

nature of the case, proper diet and occupations, and, if necessary, a certain moral restraint, would have the effect of curing that most distressing disease.

One difficult point remains to be elucidated regarding incipient cases of diastrephia, or rather, concerning the prodromic period preceding the disease itself. The question is this: When ought vice and immorality to be considered as the proximate cause and only motive of an act? or, When are they to be considered as a general cause of a lesion, either functional or structural? If hereditary predisposition or an accidental cause can clearly be traced, the case may be clear enough; but if a crime be committed by a notoriously immoral man, although he may be in all the conditions which might bring him *later* into a positively pathological state, the case appears more difficult to decide. Is the line or boundary between reason and insanity already passed or not? We say, if pathological symptoms cannot be traced *clearly*, if psychological symptoms are *doubtful*, a medical man cannot give his evidence in favor of insanity.

In the course of this paper we have tried to keep clear of a confusion about the unsoundness of moral sense, widely different from that unsoundness of mind being the result of a pathological condition of the brain. Physicians have certainly no wish to impose with ambiguities, by which juries or public opinion should be bewildered. Their differences of opinion depend only on the views they take in doubtful cases. What we have stated in the preceding pages are the principles we maintain, and we have long proved that they, at least, are disinterested ones. Now, they find a curious application in the well-known trial of a former broker of New York—Huntington.

Shortly after my arrival at Sing Sing, a book on this case was kindly lent me by one of the most distinguished physicians of the County of Westchester, Dr. Fisher, and through his influence, I was introduced to the convict in the State Prison.

From the mere reading of the case, it appeared to me that the subject of that trial had been either a lunatic afflicted with a special deficiency of moral sense, a great instinctive cunning and abilities to deceive, or that he was a lunatic under the influence of diastrephia. After my visit to the State Prison, I came to the conclusion that Huntington was neither the one nor the other.

After a few words exchanged, the convict himself declared that, in his opinion, he had never been properly insane, though he had felt *something wrong* going on in his head until two years since; up to that period he would have counterfeited any man's signature; he added,

that his habit of forging had come to a degree that, to get his *own money* out of a bank, he would have rather employed a forged paper! Being, of course, a perfect stranger to all parties who appeared in his trial, the opinion I venture is free from prejudice, and only liable to errors of my own.

It appears that, in the State of New York, a jury decides upon cases of insanity in civil law-suits, and in criminal cases when the plea of insanity is brought forward. The law of the State, as explained by the learned judge in the case of Huntington, does not admit moral insanity as an excuse for responsibility. Partial insanity, or monomania, would not absolve the party, unless it wholly deprived him of the power to distinguish between right and wrong. We have already objected to such a law, as not being in accordance with facts; but whatever the law may be, by another mistake, the jury is omnipotent in scientific difficulties, because, by its verdict, it may absolve the offender without further explanation, or condemn without knowledge of the scientific question; it may, therefore, in individual cases, correct the law, or go beyond it to either extreme. Now, I believe the jury was right in finding Huntington *guilty*, although some doubts might have been entertained on his sanity. The necessity of visible symptoms, moral and physical, establishes, as a consequence, that in their absence or obscurity, that offender could not be found irresponsible for the numerous forgeries he had committed.

I am, nevertheless, convinced of the good reasons that the honorable medical witnesses brought to establish their opinions. Both of them have shown profound knowledge and aptitude to discuss the most difficult points of philosophy and medicine; but the whole of their examination shows how much the physical symptoms were wanted to guarantee the existence of moral phenomena inclining towards insanity. It was with a certain anxiety that, reading the case, we searched for the moment when the doctors, pressed by the clever lawyer of the prosecution, would have reached their firm ground, *Pathology*; but we found that the few morbid symptoms were not sufficient either to impress the jury, or give a solid ground for the defence. However, the whole appearance of the case leads to the admission of a *prodromic stage of diastrephia*: Huntington's conduct and actions from a boy up to the time of his trial for forgery, bear the characteristic of some hereditary disposition to insanity; his diseases when a child might have had a depressive influence on his conscience, and later in his life, his temperament and propensities could hardly be checked by education. In prison, he was found indifferent to his situation when ac-

eused of a capital offence. His appreciation was defective. Was he simulating insanity? The prisoner maintained that he never had the intention of injuring anybody! still, he made use of his forgeries as the means of accumulating enormous sums of money, of which he spent a great part!

Huntington said to us, that it was a desire *that came over him*, and nothing in the world would have prevented him from forging paper; that his sleep had always been very short, but that, *since two years*, he slept better; that he had suffered from pain in the head; that he had felt blacksmith's sparks in the eye, and had been subject formerly to constipation of bowels and to external haemorrhoids.

The learned counsel of Huntington explained the curious circumstances of carelessness of his client about his forgeries. The prisoner had made no arrangements to escape or prevent his arrest. Then the able advocate put several questions to the physicians.

1st. Whether, in their opinion, the defendant was sane or insane when the forgeries were committed?

2d. If insane, what was the nature and character of that insanity?

They answered, that it might be possible that all might take place as the result, almost, of unparalleled recklessness; but that from personal examination, and also from the testimony heard, they would say that those actions were actions of an insane man. I believe that answer unsatisfactory, because it admits, almost, the recklessness of the acts, and not their morbid nature, and that the testimony about Huntington's conduct and acts could not supply the wanted symptoms and characters of an actual state of insanity.

Cross-examined by the advocate of the prosecution, one of the medical gentlemen was asked this question:

Question: Upon what the prisoner said to you, and from what you judged from his appearance, would you pronounce him of unsound mind, *from your examination of him and from his appearance?* The question is direct, and points out the vital knot of the difficulty.

Answer: Not by his appearance, but from my examination of him, I should. The same physician said further, that the expression of the face of Huntington was not that of a villain, but that of an insane man. This was a general statement, but here a description of symptoms was wanted.

Now, the advocate of the prosecution very adroitly asked the doctor to explain what was the disease of his *physical organization* which prevented him from *resisting the tendency to commit forgery?* The lawyer had felt the weak side of a jury, unable to understand the un-

sound subtlety of the question, and the doctor was obliged to confess that it was impossible for him to give the *pathological anatomy* of the case!

It was useless to say, to satisfy the audience, that Huntington had certain symptoms indicative of congestion of the vessels of that part of the brain that furnishes the nerve to the eye; a steady pain in the head; that he could not sleep, and that his head felt as if there were trip-hammers beating. The advocate insisted upon knowing the relation of physical injury to a moral perversity, by repeating his question: *What urges the patient to forge paper?*

But was not the learned lawyer laying a sort of trap for his respected and intimate friend, as he called him in his exordium? Why, that unqualified question might have misled a less capable and learned physician to invent some new monomania connected with a forging impulse! The question was improper before a jury of laymen, because it had nothing special to do with the trial as bearing on primary causality in moral nature, and a *modus operandi* of structural pathology.

Another physician, also a learned professor in a medical school, deposed, with great accuracy, that he did not believe in the existence of monomania, because the mind was a totality, and that Huntington was insane, because his intellectual and moral nature, as well as his propensities, were diseased. Why were not objective proofs added to this declaration? Moreover, the honorable witness stated that, in this case, no *delusion* nor *hallucination*, but *moral insanity*, existed; that Huntington in his moral obliquity would, perhaps, in the West, have committed criminal acts with violence; but that, having *satisfied himself* that Huntington was insane, he thought it unsafe to say or foretell what particular act in criminal propensity an insane person would commit.

Although the verdict was, I believe, a just and right one, does it not appear injudicious that a jury of laymen, not understanding in general the value of a discussion on medicine, especially under the influence and conduct of lawyers, should be omnipotent judges of the case? With reference to the *knot* offered to the jurymen, they may very well have said among themselves, that, balancing the moral account of that broker, they found him *guilty*, whatever his state of mind might have been.

Now, the prisoner is in a certain measure cured, since he says he will never more commit forgeries; punishment, besides being *just* in every relationship, may here have reformed bad natural dispositions. Again, not believing in fatalism of matter, neither absolutely in that

of hereditary disposition—we say, let us employ our free-will and energetic attention to rebuke bad inclinations or desires, in order to check the progress or beginning of a mental disease.

I conclude this paper by submitting the following propositions:

I. That the disease called moral insanity is but an affection of the faculty of volition and instincts, always attended by physical and physiological symptoms.

II. That the name of moral insanity is defective, because it bears no relation to its cause, symptoms, and results; and that it misleads the opinions of the bar concerning crimes committed under its influence.

III. That the laws and rules concerning insanity, relating to civil and criminal cases, ought to be made conformable to the actual state of medical science.

IV. That no person ought to be considered as being insane, if physical and mental signs cannot be traced and ascertained.

V. That a reform concerning medical certificates is necessary, to insure regularity in obtaining from courts or judges orders to detain a person as being insane; that no such document be admitted, unless containing,

1st. All the anamnestic, physical, physiological, and mental symptoms of the case.

2d. The diagnosis and prognosis of the disease.

Now, until a reform be made, we beg the license to say to legislators and jurists, *Si habetis corpus nos habemus animam.*

Report of Operations performed in the Eye Department of the Brooklyn Medical and Surgical Institute. By Dr. JULIUS HOMBERGER, Ophthalmic Surgeon of the Institute.

(Continued from October No., p. 262.)

21. *Strabismus converg. concomitans oc. dext.* John B., æt. 15 years, had a deviation of two lines of his right eye. As an exception from the rule in concomitant strabismus, the affected eye was not in the slightest way amblyopic. I divided the tendon of the rectus internus on the 16th of June, and saw the patient perfectly cured on the 25th.

22. *Strabismus concomitans conv. oc. sin.* Charles S., æt. 31 years. I operated by tenotomy on both eyes at once, as the deviation was exceedingly great in this case. I saw the patient, a fortnight after the operation, with a slight squint—half a line of deviation, perhaps—

which will disappear during the third period, *i. e.* in the course of the next two months.

23. *Purulent Chorioiditis. Iritis. Cyclitis.* Elizabeth G., a colored woman, 39 years of age, presented herself on the 17th of June, at the clinic. She complained about most violent pain in her right eye, which had been attacked by a severe inflammation two months ago, without any cause known to her. A physician had treated her with antiphlogistic and resorptive means. She seemed to be very weak; was salivated, and very much afraid of losing her other eye, with which she had already begun to see less sharply than usual.

The cornea of the right eye was transparent, except a slight, still translucent, opacity of its posterior surface. The anterior chamber was almost obliterated; the iris was discolored to a mixture of brown and gray; the pupil was not central, but upward and inward, and its margin connected with the capsule. The latter was not transparent; when I concentrated the light of the ophthalmoscope on it, I obtained only a dim reflection. It was impossible, therefore, to get a view of the depth of the eye. The vessels of the conjunctiva were pretty much injected, as was also the case with the anterior ciliary arteries and the subconjunctival vessels in general. Near the external and superior part of the cornea the scleroteca was discolored, and showed a small dark-brown tumor, scarcely two lines in diameter. The examination of the left eye with the ophthalmoscope did not yield any result. It was the first negro eye I ever examined with this instrument. I had a right to suppose chorioiditis, by the anamnesis, but could of course not diagnosticate it by the ophthalmoscope, as I had no normal eye for comparison, and as the strong pigment naturally renders the examination of the choroid more difficult with negroes.

The right eye gave no perception of light, and the organic changes were of the gravest nature. Antiphlogistics, &c., had been used already, more than necessary; and as I did not doubt that purulent chorioiditis was the cause of the trouble, that dissolution of the retina had already taken place, and the left eye was in danger of becoming sympathetically affected, I resolved to remove the eyeball at once. This operation is not a severe one, when properly performed. The eye is only shelled out, as it were, all the muscles being left behind; and the operation is always to be recommended in cases of purulent chorioiditis, with sympathetic affection of the other eye.

I placed the patient under the influence of chloroform, and made first the tenotomy of the inferior internus and superior recti muscles,

just as in the operation for strabismus, only dividing the conjunctiva to a larger extent, and less carefully. With a pair of Cooper's scissors I then divided the optical nerve. After this, making the eyeball bulge as far as possible by pressing the lids downward, I cut from backward the *externus rectus* and the *obliqui* muscles. The eye came out of the orbit perfectly unhurt; all the muscles were left behind, and only the inserted parts of the tendons were to be seen on the removed organ. The bleeding was trifling; the patient went home an hour after the operation. I ordered cold compresses and good and nutritious diet, and a solution of chlorate of potash against the salivation. I went to see her the third day after the operation, and found her working in her kitchen. There was no inflammation whatever; the ciliary neuralgia had disappeared; she could sleep all night, and the troubles of vision in the second eye seemed to her to be decreasing.

The removed eye did not show anything abnormal in regard to form and diameters. When dissected, it revealed various spots of destroyed retina upon those places of the choroid where purulent choroiditis had set in. The lens was not to be discovered, but as a fragment contained in the capsule, which was grown together with the whole posterior surface of the iris. The iris was much thickened and degenerated. The tumor mentioned above, as being near the cornea, extended through the sclerotica, and was connected with the ciliary body. As to its precise nature I do not allow myself to pass judgment. I sent it for examination to more competent hands—to Dr. Schweigger, one of Graefe's assistants, and a first-class authority in microscopical matters.

I shall not fail to publish the result of his investigation as soon as he communicates it to me, together with a minute account of the microscopical examination of the whole eye.

24. *Staphyloma Iridis Totale. Hydropthalmus. Ablatio Cornea.* Caroline Ch., at 16 years, presented on her right eye a complete staphyloma of the iris. The diseased eye had been wounded with scissors some ten years ago; it is totally blind, larger than the other; the superior eyelid extended, and showing small varicose veins at its margin. I diagnosed, as the case belonged, undoubtedly, in the hydropthalmic group, a chronic choroiditis, secondary to the mal-position of the iris, with synchysis of the vitreous body, mechanical excavation of the papilla of the optic nerve, and paralysis of the retina. I proposed to the patient the ablation of the cornea, so as to render her able to wear an artificial eye. When I opened the eye

with a large cataract-knife, forming a semicircular flap, a large part of the perfectly transparent and most fluid vitreous body ran out. I took the flap then, and cut it off with scissors. The patient began vomiting just when I was done with this, and the rest of the corpus vitreous was now thrown out, and some bleeding from the vessels of the chorioidean ensued. The blood soon formed a coagulum, but at a second effort at vomiting, there was a new rush of blood. After this, the bleeding stopped. For the first few days, cold water was put by compresses on the eye; then warm poultices were applied, to favor the beginning of suppuration. The coagulum came out by-and-by, and on the 26th of July, five weeks after the operation, the patient had a very nice stump, just small enough to receive an artificial eye, and large enough to give to the latter all possible mobility.

25. *Strabism. converg. concomitans oc. sin.* The patient, Esther H., æt. 24 years, presented a strabismus of 4". I made, with caution, two tenotomies on both sides at once on the 23d of June, and saw the patient with straight eyes a fortnight afterwards.

26. *Prolapsus Iridis. Iritis. Iridectomy.* Lora T., æt. 13 years, had got a perforating ulcer of the cornea and prolapsus of the iris during an attack of variola. The mother brought her to me the first day the patient came out of her bed. I found the fibres of her light-blue iris dim, and indistinct on both sides. The right pupil was motionless, and showed small posterior synechies. On the left eye, I found the whole inferior part of the iris prolapsed, and the prolapsus already covered with newly-formed tissue; the pupil was somewhat drawn downward; the iris without mobility. The patient could scarcely read large print with this eye, while the functions of the other were but little disturbed. I performed iridectomy on the left eye, and the inflammation subsided very soon; the sight improved so much that the patient read small print a few weeks after the operation. On the other eye, I succeeded in tearing up the synechies by the use of a solution of atropine, administered *coup sur coup*.

27. *Chronic Iritis. Closure of the Pupil by Pseudo-Membranous Exudations. Posterior Synechies.* Michael C., æt. 46 years, had but his right eye; the left one was perfectly atrophied by a wound he had received thirty years ago. The right eye showed the symptoms above mentioned, and the patient could hardly lead himself. I performed iridectomy on the 27th of July. The patient could see my watch, and read very large print, No. XX., in the middle of August. He suddenly disappeared from the number of my daily visitors, and I have not seen him since. In all probability his sight is still improving.

28. *Strabismus concom. convergens oc. dextr.* Charles D., æt. 18 years, with a squint of the right eye of five lines, was operated by tenotomy of both the recti interni muscles. I saw him on the 10th of August, with a strabismus of one line. I proposed a new operation, but have not seen him again.

29. *Strabismus converg. concomitans oc. dextr.* Josephine H., æt. 32 years. Deviation 4''. Tenotomy on both sides at once, 9th August. Seen with convergence of scarcely half a line on the 15th of August.

30. *Chorioiditis. Amblyopia. Beginning Atrophy of the Optical Nerve. Cataract.* John B., æt. 45 years, had noticed since a few years that his sight was getting weaker and weaker, and now the sight of the right eye was entirely failing. He could, with the left eye, not distinguish No. XX.; with the right, he had merely a good perception of light. I found the pupils a little torpid and dilated on both sides, and the pupil of the right eye gray. With lateral illumination, I found an almost mature cataract on the latter. Its examination with the ophthalmoscope was impossible. The bottom of the eye on the other side was easily to be examined by the ophthalmoscope. I found chorioiditis, opacity of the central parts of the retina, particularly around the macula lutea, and that particular tendon-like colored appearance of the optical nerve, indicating atrophy. At the same time, I discovered those thin, radical, opaque stripes in the lens, indicating beginning cataract. I gave sublimate and iodine in small doses to the patient; ordered vesicatories behind the ears, to be kept open for weeks, and performed iridectomy, (partially with the hope to stop the inflammatory process,) as I knew it woud become soon necessary to extract the obscured lens. The operation of attacking and extracting the lens with spoons seems to be more safe, if iridectomy is practiced beforehand; and I consequently did not risk anything in performing the operation ambulatorily, as the patient was momentarily unable to enter the hospital and undergo the extraction of the lens.

I will give, in the future, the rest of the history of this case, as soon as I get the patient to undergo the remaining operation.

(To be continued.)

Syphilis during Pregnancy and Lactation. (Section 285 of "A Text-Book of Midwifery," by Dr. Carl R. Braun, Professor of Midwifery, etc., in the Imperial Hospital, Vienna. Translated by BENJAMIN LEE, A.M., M.D.)

Women suffering from secondary syphilis during pregnancy usually infect the foetus and the peripheral portions of the egg through the medium of the blood. The egg consequently perishes, and is prematurely expelled. Many cases of habitual abortion are to be explained in this manner.

Should the foetus withstand the infectious influence of the mother until the second half of pregnancy, it then does not usually die, but is often prematurely born, giving evidence of its syphilitic heritage at birth by a puny frame, a dirty, smoky, mouldy skin; by vesicles of pemphigus on the palms of the hands and soles of the feet; by round, copperish-red spots or scars on the same surfaces; by condylomatous growths at the points of transition from cuticle to mucous membrane; and by ozena, or nasal catarrh. Such children generally die in the course of the first few days.

On examination after death, evidences of congenital or hereditary syphilis are often found, sometimes in the shape of collections of pus, of the size of a filbert, in the thymus gland, the lungs, the kidneys, or the testicles; sometimes as areolar growths in the liver. These, however, are in many cases absent. Any one who will take the trouble to examine the bodies of a number of foetuses suspected of syphilitic infection, can readily satisfy himself of the frequency of these alterations in the various organs.

As to the connection between hereditary syphilis and the degeneration of the thymus and liver, noticed by Dubois,* I have had several opportunities of convincing myself of its reality, in company with Wedl,† Dittrich, and others. We usually found in the corresponding lobes of the thymus several cavities filled with a purulent fluid, or a large central cavity, containing, like the former, a turbid, yellowish fluid. This fluid did not contain the well-known gray nucleated elements which characterize its normal condition, but granular spherules, which, on being treated with dilute acetic acid, exhibited the characteristic nuclei of pus-corpuscles; in the intercellular fluid, elongated threads of mucus also came into view. In the more consist-

* Dubois, *P. Gazette Médicale*, 1850, No. 20.

† Wedl's *Pathol. Histologie*, S. 359 and 519.

ent portions of the walls an exquisite variety of cellular tissue was met with.

In the liver were found cellular growths of a more definite form. In one case, a rounded tumor of the size of a bean, and tinged with yellow, projected slightly from its concave surface, with edges not distinctly defined, but shading off into a brownish-yellow, and finally, into a liver-brown color. The lighter-colored portion of the growth extended to a depth of about the third of an inch. On section, its centre was found to be intensely yellow. The consistence of the imbedded mass was generally very perceptibly denser than that of the surrounding parenchyma; to the touch it was irregularly granular; on pressure, only a small quantity of turbid fluid could be expressed. The softer parts of the new formation consisted principally of cells of the most varied forms, presenting one, two, three, or even four processes, and containing one or two nuclei of an oval form, in each of which was found one nucleolus. The nuclei were eccentric in position, and when double were often in close proximity; but in certain cases, and especially in that of the hour-glass cells, were situated at the two expanded extremities, at a considerable distance from one another.

The fusiform cells, varying greatly in their transverse diameters, were arranged upon one another, as usual, in obliquely ascending layers. The denser portions consisted mainly of fibrous fascicles. The remaining substance of the liver offered no striking anomaly.

Another phase of these cases is that in which gestation is not interrupted by the syphilitic poison; the fetus matures and is well developed, and the child presents at first not a single symptom of syphilis. The sanitary condition of such children, however, usually presents a sad picture, when, at a later period, hereditary syphilis, scrofula, or rickets manifest themselves. Women affected with secondary syphilis, whether its evidence be confined to the skin, the mucous membrane, the iris, the bones, the cartilages, the glands, the muscles, the areolar tissue, or the internal organs; or whether its impress be stamped upon all these parts of the economy at once, abort very frequently, or give birth to dead (macerated) or miserable living children. Or if they perchance bring into the world a nature and apparently healthy offspring, the hereditary disease shows itself in the course of a few days or weeks. A determination of the two following questions is therefore of great importance in practice:

1. Are the condylomata of pregnant women ever an indication of constitutional syphilis? and if so, what particular forms of them?

2. Are vaginal blennorrhœas ever an indication of venereal disease? and if so, what forms of them?

Condylomata occurring in connection with other symptoms of secondary syphilis, as for example, the syphilides, enlargement of the glands in the region of the neck, and the flexure of the elbow, ulcerations of the throat, and indurated chancres, usually, indeed, communicate the disease to the child during pregnancy. But, with regard to condylomata occurring in women who appear otherwise entirely healthy, presenting no other trace of secondary syphilis, there still exist wide differences of opinion. They are supposed by some to be specific, by others non-specific. Many number the pointed condylomata with the latter, and the broad with the former variety. It is considered by a large number of writers that they occur only secondarily, as a product of chancre, and are contagious; by another school, that they are the result of both chancre and gonorrhœa; and further, there are those who suppose that they occur primarily and without the precedence of any syphilitic symptoms, and are therefore inoculable and contagious.

The opinion that the pointed condylomata are simply the result of maceration of the epidermis or epithelium by a blennorrhagic or seborrhagic section, has its supporters, while the so-called subcutaneous or endofollicular condyloma is justly said by many to result from neither syphilis nor gonorrhœa, and hence, of course, to be non-contagious.

With so extensive a diversity of views, it becomes of the greatest importance to the gynecologist to adopt a definite opinion on the nature of these growths, in order to be able to shape accordingly his treatment of women affected with them during pregnancy, and of their children during lactation.

Simon,* of Hamburg, has published the following very important propositions with regard to them, which my own observation leads me to sustain. He says:

"There is, in point of fact, no reliable diagnostic sign between syphilitic and non-syphilitic warts. *The greater proportion of such growths in the anal and pudendal regions are probably of an infectious nature*, as they doubtless were before the outbreak of the venereal disease. They are hypertrophic growths of the submucous and subcutaneous cellular tissue; dry where the epidermis is thick, moist where it is thin or wanting, (*plaques muqueuses*), and vary in form

* Simon, In d. spez. Path. und Therap. Red. Virchow, Bd. II., Abth. I., S. 421.

with their situation, being broad and symmetrical about the anus, and pediculated in the vagina and at its mouth."

It is extremely improbable that condylomata occurring during pregnancy in the neighborhood of the genitals, depend simply upon chafing of the epidermis or epithelium, for we find profuse leucorrhœa in fifty per cent. of women during the second half of pregnancy, producing redness, chafing, and even excoriation, and yet never exerting the slightest injurious influence on the development of the foetus, or infecting the child with gonorrhœal ophthalmia during labor, or inducing specific eruptions after birth; while, on the other hand, condyloma, in all its varied forms, is met with only in one per cent. of the women in lying-in institutions, and still more rarely among married women.

The condyloma of pregnancy must therefore be produced, not simply by a leucorrhœal secretion, but by some peculiar element of this secretion; and we may safely say that every condyloma occurring on the genitals of pregnant women justifies a suspicion of syphilis, or of some one of those similar hybrid poisons; and also that it may lead to symptoms of the hereditary disease in the child, as has been established by my own investigations.*

Friedinger's† proposition that "children born of mothers affected with pointed condylomata (primary syphilis) are never infected by the poison," cannot be received as an axiom, because his observations extended only to the third month, while hereditary syphilis may break out even after vaccination has run its normal course, and subsequently to the limit fixed by him. As regards the relations of this subject to medical jurisprudence, the following representative dogmas of Diday,‡ and, to some extent, of Hebra, Sigmund, Friedinger, Wertheimber,§ the author, and others, on the *transmissibility of syphilis in pregnant and nursing women to the child*, are of the greatest importance.

1. If the father present symptoms of the syphilitic diathesis at the time of coition, the child will undoubtedly acquire them.
2. If the father has been infected at some previous time, but at the time of coition presents no symptoms of the disease, the child may possibly, but not certainly, escape.

* Braun, C. Zur Syphilis Congenita, Öster, Zeitsch. f. Kinderheilk. Wien, 1856, S. 291.

† Friedinger, Ebenda, S. 255, und Wiener Ges. Z., 1854, V.

‡ Diday, Traité de la Syphilis de Nouveau-nés et des Enfants à la Mammelle, Paris, 1854.

§ Wertheimber, Ebenda, S. 145.

3. On the same principle, the influence will certainly make itself seen if the father be in the interval between two consecutive outbreaks of constitutional syphilis, or between an attack of the primary affection and the subsequent appearance of the general symptoms at the time of connection.

4. It may also occur, if a diseased man cohabits with a healthy woman during pregnancy, without the latter showing the slightest evidence of the existence of the affection.

5. The mother implants the disease in her offspring, either by the production of an ovum, which has become diseased in consequence of the constitutional vice, or if not herself infected until after conception, through the medium of her morbid blood; for if a widow whose deceased husband was infected contracts a marriage with a perfectly healthy man, the children by this marriage may evidence most unmistakable traces of the affection; and further, if a healthy woman suckles the syphilitic child of a stranger, her own subsequent offspring may feel the pernicious effects of her incautious kindness.

6. A mother affected with the secondary symptoms at the time of conception may transmit the disease to the child, while the father is perfectly healthy, and has never been syphilitic.

7. A woman who has taken the disease during pregnancy may transmit it to the child between the second and the seventh months; whether this be possible at an earlier or a later period is at present doubtful.

8. In a marriage where only one of the parties is syphilitic, all the children are not of necessity affected. It may even happen that only one of twins is born with the seeds of disease in its system. This appears to depend upon some preponderating influence of one or other of the parents. If both parents are syphilitic, the child is usually born with the marks of disease upon it. Hereditary syphilis begets serofula only in the presence of certain conditions, viz.: the fact that both parents at the time of coition were in the third stage of the disease; that the constitution of the child, or of either of its parents, is lymphatic; that the child has been nourished entirely upon its mother's milk; or finally, that the anti-syphilitic treatment was not adopted at the proper time.

9. Syphilis can be communicated to the mother through the foetus. The transmission here takes place through the blood, and corresponds to the infection of the foetus by the father, while the mother is healthy.

10. The immediate communication of syphilis to the child (from a primary sore or virulent vaginal discharge during labor) is, in the

opinion of most gynecologists and syphilographers, rare. For this there are two reasons: first, that primary sores are rarely found in the advanced stages of pregnancy; and second, that it would necessitate the prolonged contact of a particular part of the fœtus with the surface of the ulcer, or the presence of an excoriation on its skin, and the partial absence of the *ver nix caseosa*.

11. In sucklings, the infection occurs either through an infectious point on the skin of the nurse, or from the diseased milk. Generally it is first communicated from a child to the nurse, whose nipples then become the seat of condylomata, and in turn transmit it to another child.

12. Although, in the opinion of Diday, Simon, Baumès, Cullerier, and Vidal, it has been demonstrated that infection of the suckling may occur through the medium of the milk, still they allow that the affection is in such cases milder, the eruption appearing later, and often manifesting itself under the form of serofula.

13. A woman who has given birth to a syphilitic child runs no risk of infection in nursing it, from the fact that syphilis does not occur twice as a constitutional disease in one and the same individual.

14. The passive infection of nursing women usually results from mucous tubercles in the mouth of the suckling; these being among the earliest manifestations of syphilis in the new-born, and pouring out a very abundant secretion.

15. The demonstration of the actual transmission of syphilis from the nurse to the child, in any particular case, is surrounded by difficulties. The nurse may have been cured previous to the time of the examination, and no trace of the disease be left upon her person; or if there be evidences of it, it is supposable that she may have been since infected by another child; or the child may have become diseased through the medium of the milk, although the nurse has had no visible indication of its existence in her system; or the child may have been infected by another person; or finally, a small syphilitic scar upon the nurse might easily escape the scrutiny of the physician.

16. The syphilis of the new-born is, under very favorable circumstances, transferable, although not always inoculable.

17. If the virus of a primary sore be introduced by inoculation at the same time with vaccine virus, a hyaline vesicle is formed, which ruptures on the fourth day and develops the syphilitic ulcer; the vaccine lymph, however, is vitiated, the regular pustule not forming until the eighth day, according to Sigmund, and, as Friedinger's investigations would show, not even then.

18. Vaccination, if it ran its regular course in a child affected with latent syphilis, induces a more speedy manifestation of the latter. There are cases, however, in which it does not show itself for a considerable period after vaccination.

19. Rickets, in its various grades and modifications, is a not unusual termination of hereditary syphilis, where it has not been recognized and treated as such.

20 Condylomata rarely, almost never, induce constitutional syphilis in pregnant women, and, save for their obstinacy, admit of a tolerably favorable prognosis. They are, however, extremely dangerous to the fetus. The poison interferes with embryonal development, attacks all the most essential organs, and in the new-born enters the great mass of the circulation, without any diminution of its virulence by the action of the lymphatic system.

Physicians are still divided in their opinions as to its treatment during pregnancy, from the alleged fact that a mercurial course may kill the fetus and induce abortion. This apprehension, however, we do not share, and to our mind the method proposed by Simon appears perfectly rational. He says: "Inasmuch as pregnant women, suffering from any well-marked syphilitic affection, usually abort in the second half of pregnancy, gestation cannot justly be considered to contra-indicate treatment; on the contrary, a judicious anti-syphilitic course may preserve the life of the fetus. Only when confinement is very close at hand may it be more judicious to employ, for the time being, means which are merely palliative, not commencing the radical treatment until after the end of childbed."

"That mercury exerts an injurious influence on the fetus is true only in so far as it perhaps somewhat dwarfs its growth, while syphilis, on the other hand, destroys its life."

It is not advisable to employ either decoction of sarsaparilla or iodide of potassium in place of mercury during pregnancy, the stomach and intestinal canal being too irritable for these remedies; the latter of which might, in addition, exert a very equivocal abortive tendency upon the vascular activity of the uterus.

The mildest preparations of mercury are those best adapted to the pregnant condition; externally the mercurial ointment in small quantities, and blue pill or calomel, with opium, internally. The corrosive chloride may prove poisonous to the fetus, and cause abortion.

If a woman suffer from primary sores on the genitals during the later periods of pregnancy, an attempt must be made to heal them if possible, in order that the child may escape infection during labor.

At the same time, irritating or corrosive applications should not be made, preference being given to such mild agents as lime-water, lead-water, or a decoction of cinchona combined with a little sulphate of zinc and opium, as powerful escharotics may readily induce abortion.

Condylomata seated in the mouth of the vagina require during the last three months a very cautious expectant treatment. They frequently grow with rapidity in this situation, obstinately resisting every remedy, and yielding only to cauterization, by which, however, the fetus is not in the slightest degree benefited, and premature labor may be produced. During, or soon after childbed, these growths either die of themselves, or soon disappear under the topical employment of the *aqua phagadenica* of the older writers, or some other stimulant lotion. Both ulcers and condylomata should be touched during the progress of the labor with nitrate of silver, and coated with collodion or cerate; injections of oil should be thrown into the vagina, and the child should be most scrupulously washed, especially about the neck, where the skin is thin and exposed. Every excoriation upon its surface should be touched with nitrate of silver, and any subsequent infection from the mother should be most carefully guarded against.

The mother may be permitted to nurse her child for a few weeks, should it seem requisite, provided that her affection be of a mild form, and she be not otherwise incapacitated; for if her blood were capable of building up the fetus to maturity, her milk ought to be fit to nourish it. As a rule, however, artificial nourishment is to be preferred after the third week.

Should a mother affected with constitutional syphilis be unable to nurse her child, on which naturally rests a suspicion of syphilitic taint, it must not, even though apparently healthy, be given to another woman to nurse, inasmuch as the congenital affection often does not make its appearance until quite late, and may infect the nurse through the nipple. If, however, a nurse be found willing to run the risk of infection from her apparently healthy charge, and to undertake the business of suckling it, it becomes the duty of the physician to acquaint her with all the possible consequences that may result from such a course. The children of women affected with syphilis or condylomata must generally be artificially nourished, whether at home or in foundling hospitals, and for this purpose cow's milk answers every requirement. Only in the case of very puny children will it be necessary to keep a goat. The mother should be subjected to an anti-syphi-

litic treatment during lactation, in order that the taint may at the same time be eradicated from the nursing.

Inunctions of from five to ten grains of mercurial ointment on alternate days are well adapted to the treatment of the child; or, should it present actual ulcerations upon the surface, the sixth of a grain of blue mass in some mucilaginous vehicle, or still better, the third of a grain of calomel, may be administered daily until the disappearance of the affection, and then suspended for a considerable length of time, in order to avoid its more advanced results. The painful ulcers will heal very rapidly under the use of frequent applications of *aqua phagedænica*,* with opium.

If habitual abortion results from latent syphilis on the part of one of the parents, the suspected party must be subjected to a mercurial course. In subsequent pregnancies, mature and vigorous children will generally be produced as a result of this mode of treatment.

External Fistula of the Stomach, and its Surgical Treatment. By Prof. MIDDENDORFF. (Translated and condensed by C. A. HARTMANN, M.D., Cleveland, Ohio.)

External fistulae of the stomach may be epigastric, hypochondriac, umbilical, etc., according to the region in which they open. They are direct or indirect, according to the character of the communication established. A preternatural fistula results from disease, wounds, etc.; an artificial one is made intentionally by the surgeon.

This affection is not of very frequent occurrence; only forty-seven cases are known, besides one observed by the author. The age of the patients varied from nine to eighty years. In regard to sex, there were twenty-one males and twenty-four females. The causes are either external—mostly wounds, or swallowed foreign bodies—or internal: carcinoma, inflammation or abscess of the stomach. The external opening is usually in the umbilical, left hypochondriac or epigastric region; but may be between the ribs, or near the xiphoid cartilage. Internally, the fistula opens more frequently into the left than into the pyloric part of the stomach. In extent, there is a variation for the external opening from a few lines to several inches. Its edges are usually thick and rounded, but not covered with mucous membrane. It may be of a round, oval, angular, irregular or slit-like

* Aq. phagedænica is a solution of chloride of calcium, holding in suspension a small amount of bichloride of mercury.

shape. The surrounding parts are thickened, excoriated, scarred, callous. Complications are: secondary passages, prolapsus of the stomach, caries of the ribs, ossification of the intercostal spaces, etc. A direct fistula has a short course; occasionally it runs obliquely, then usually from the right to the left side, or it is divided. Indirect fistulae are of different length, width, and direction; frequently bag-like.

Symptoms.—The contents of the stomach appear at the external opening either instantly after the infliction of a wound or other injury, or subsequently to inflammation, etc.; or after the protecting scab is detached. In cancer and abscess of the stomach, long-continued sufferings, with or without vomiting, precede the formation of the fistula; finally, a tumor appears, breaks and emits the swallowed food, either along with the pus, or afterwards.

The diagnosis is to be based upon the symptoms just enumerated, the locality and direction of the opening, and the free movement of an introduced probe in a large cavity.

The prognosis is not entirely unfavorable, as the disease may exist for twenty or thirty years without seriously interfering with health. Finally, however, the stomach is apt to contract and disturb digestion by its great irritability. Death may ensue from exhaustion, hectic fever, or consumption. Two-thirds of all the cases reported were not cured—probably in consequence of their having been established too long.

Treatment.—For the sake of prevention, wounds of the stomach must be united, if possible, complete rest enjoined, and an antiphlogistic treatment employed, combined with slight pressure. A forming abscess is to be matured, opened, and cauterized with nitrate of silver. The patient must lie quietly on his back, and take but little, not irritating, nourishment. Gastritis should be treated on the same principles, with due regard to ulceration, if present, and great attention for a long time. Extraneous bodies perforating the abdominal walls from within the stomach are to be cautiously extracted. To make incisions for that purpose is dangerous, on account of the frequent and extensive adhesions; unbloody dilatation of the existing abscess seems preferable. Suppuration ought to be encouraged, the free discharge of the pus attended to, and the lunar caustic applied subsequently.

A recent fistula may be closed by a strict horizontal position of the patient, little nourishment, tonics, incisions of the undermined integument, cauterization, and slightly irritant dressings.

The general treatment is indicated by the circumstances of the case. Excoriations around the opening are prevented by horizontal position,

frequent washings, powdering over with magnesia, slightly astringent fomentations, lead-water, nitrate of silver, covering with gold-beater's skin, collodion, or glycerine. A slight pressure by means of sponges, pads, etc., is usually of good effect.

The fistula has been closed with girths, straps, compresses, German tinder, obturators made from acorns, cork, or silver, adhesive strips and other plasters. Of better service are small cushions of india-rubber, filled with air, or of elastic leather, held in position either by a steel spring or elastic straps.

The patient must eat and digest in a horizontal position. He should have a good nourishing diet, avoiding irritants, eat little at a time, chew and salivate well what he eats. Hunger increases the pains. If a meal is followed by great distress, the bandages should be loosened, and the food allowed to pass out.

Prolapse of the stomach is difficult to return. The only remedy is to reduce the size of the fistulous opening.

For a radical cure, horizontal posture and a proper diet are indispensable; under their influence alone some cases of several years' standing have got well. Dieffenbach applied, repeatedly, a cone-shaped hot iron. Other methods of cauterization might be employed; but they are only proper for narrow passages. Plastic operations have been recommended by Bérard and Wernher. The general principle is either to cover the opening with integument, or close it by insertion. Though usually not dangerous, such interference is only practicable in a slit-like, or small, round fistula. Paring of the edges may do for a fistula in the soft abdominal integument, but then the incisions should be as deep as possible. The bleeding surfaces are united by the common suture, and this is not to be removed for a long time. Of course, the stomach should be empty. Morphia, ice-pills, slight pressure, cold applications, strictly horizontal position.

Transplantation requires movability of the cutis. This is obtained by lateral incisions and undermining of the flaps. A third method is to pare the edges and transplant a cutaneous bridge, formed by an incision below and parallel with the existing opening. This plan was adopted for the cure of a fistula of seven years' standing. For twenty-seven years previously, the patient, a woman, had been suffering from obstinate, violent pains in the left hypochondriac region, probably due to inflammatory affection of the left side of the stomach. An accidental pressure on that region, twelve years after the beginning of the trouble, resulted in a tumor; in the course of the next eight years, an abscess, and finally a fistula, formed; the latter opening between the

cartilages of the sixth and seventh ribs, nearly below the mamma, about an inch in width, three inches in length. A palliative treatment proved of little avail. The fistula having been filled with compressed sponge, a parallel incision was made, the flaps separated and undermined, then the edges of the fistulous opening pared off and united by twisted sutures, while the gaping lower incision was to some extent closed by a simple knot. The introduction of a plug of lint served to deviate from the original opening whatever might be thrown out by the stomach. Under a judicious subsequent treatment, the tormenting pain soon decreased. The needles and the plug could be removed in a few days, and in about six weeks the lower wound had completely healed by granulation, after its having been repeatedly touched with nitrate of silver. A few weeks later, a very small opening appeared in the scar. It emitted nothing but air, and there being no trouble except when this outlet became blocked up, all attempts to close it were relinquished. For nearly two years afterwards no further change occurred, only in coughing a little food passing out. The pain, considerably diminished, occurs only once or twice during the night; and on the whole, although not completely cured, the case is greatly improved.—*Wiener Medizinische Wochenschrift*.

MONTHLY SUMMARY OF DOMESTIC MEDICAL LITERATURE.

BY T. GAILLARD THOMAS, M.D.

11. *Exsection of Knee-Joint in consequence of Disease of Bone caused by a Gunshot Wound.* By E. S. COOPER, M.D., of San Francisco. (Cleveland Medical Gazette, Oct., 1861.)
12. *Poisoning by Belladonna—Recovery.* By Dr. SAMUEL WILLEY, St. Paul, Minnesota. (*Ibid.*)
13. *Pus-Corpulence in the Air.* By Dr. EISELT. (Pacific Medical Journal; from Boston Medical and Surgical Journal.)
14. *On the Communicability of Secondary Syphilis.* Report of the Brooklyn Medico-Chirurgical Society. (Medical and Surgical Rep., by Pacific Medical and Surgical Journal.)
15. *Clinical Report on the Treatment of Phthisis by the Chlorate of Potassa.* By Dr. AUSTIN FLINT. (American Journal of Medical Sciences, Oct., 1861.)
16. *Experimental Researches on Points connected with the Action of the Heart, and with Respiration.* By AUSTIN FLINT, JR. (American Journal of Medical Sciences.)
17. *On the Formation of Knots on the Umbilical Cord.* By WM. READ. (American Journal of Medical Sciences.)

18. *On Veratrum Viride as an Arterial Sedative.* By Drs. CUTTER, RICKARD, and INGALLS, Committee, Middlesex Medical Society.
19. *On the Detection of Strychnia as a Poison, and the Influence of Morphia in Disguising the usual Color-Test.* By JOHN J. REESE, of Philadelphia. (*Ibid.*)
20. *Summary of the Transactions of the College of Physicians of Philadelphia.*
21. *Case of Coccygodynia Cured.* By Dr. GODFREY, of Sonora.
22. *Transactions of Medical Societies of Buffalo.* (Buffalo Medical and Surgical Journal.)
23. *Extracts from American Druggists' Circular.*
24. *A Singular Case of Sudden Death.* By A. N. ALLEN, M.D., Pittsfield, Mass. (Berkshire Medical Journal, October, 1861.)
25. *Poisoning by Corrosive Sublimate.* By Dr. CABOT, of Boston. (Medical and Surgical Journal, October 17, 1861.)

11. At time of operation a probe would enter the substance of the bones very readily for an inch or more. After the removal of the joint the wound healed readily by granulation, and in three weeks patient moved about on crutches. "No pain or trouble of any kind occurred after the operation." In three months patient went from San Francisco to Philadelphia, and in six months Dr. C. heard from him that he was quite well and engaged in business.

12. A very interesting case, occurring to the son of the reporter, who ate, by mistake for liquorice, between thirty and thirty-five grs. extract belladonna. The child was a little boy, but curiously, his age has been omitted in the report. The poison showed its effects by unsteady gait, dilated pupil, wild and gay delirium, and the usual sighs; these continued after free emesis, which was practiced half an hour after it was swallowed. An enema of tr. opii, gtt. xij., and a dose of $\frac{3}{4}$ j. olive oil, together with coffee and vinegar and water, were given, while the cold douche, cataplasms of mustard, and other external means were employed. All these means signally failed, and at 4 a. m. of the 24th (the poison was taken at 6 p. m. on the 23d) the child was comatose, pulseless at the wrist, and insensible to pinching, pricks of pins, and other disturbing influences.

At this juncture, Dr. Hand suggested sending for a galvanic battery, which I had given an asthmatic patient some two years before, and trying that. In fifteen minutes or less the battery was in operation, and the strongest possible shocks administered over the regions of the thorax, neck and spine particularly, for four hours, without intermission. For three hours the only beneficial results were a slightly better color, less cold perspiration about the forehead, and somewhat increased warmth about the extremities; pulse a shade

fuller. At the expiration of the fifth hour, he would sometimes start suddenly upon the reapplication of the poles of the battery, if they were momentarily withdrawn. An hour after, would change his position slightly; and eight hours after the first application, uttered an irritable cry, and would make awkward attempts to thrust them aside. For six hours longer, making fourteen hours in all, were the shocks continued, at intervals of from twenty to forty-five minutes—their use determined by the stupor. During the night of the 24th, coffee and beef-tea were administered, ice inclosed in a linen rag frequently applied to his lips and tongue; late in the evening he had two or three bilious and very offensive dejections.

Not the slightest contraction of the pupils occurred until twenty-two hours after the accident, and then but slightly. Thirty-six hours after poisoning, the left pupil was perceptibly smaller than the right. He then saw, when aroused and interrogated sharply, objects double; for instance, two papas, two mammas, etc. This gradually passed away, however, and his recovery from the morning of the 25th is without especial matter of interest.

13. Dr. Eiselt, wishing to discover how infection takes place in purulent ophthalmia, where no contact had taken place, fixed between the beds of two of a large number of children thus affected an "aeroscope," discovered by Pouchet, which detects the presence of pus or other globules, by "driving a certain quantity of air across a glass plate moistened with glycerine, upon which the particles of dust and microscopic forms remain fixed, and may thus be readily examined by the microscope." The presence of pus-globules in the atmosphere was thus determined, and it was deduced by those experimenting that by this means infection in this class of cases occurs.

14. A young physician, W. R., offered himself to the interest of science as a subject for syphilitic inoculation. He was at the time twenty-four years of age, healthy and robust, and never before infected with the disease. One of Wallace's methods was employed. By means of a small vesicatory, the cuticle upon the left arm was raised, the vesicle opened, and under the epidermis, on the 5th of January, 1852, matter inserted, taken from acne pustules in the frontal and superciliary region.

Jan. 10th. No local effect; the blister is healing in the ordinary way.

Jan. 20th. Soon after the wound had healed, a papulous eruption appeared, accompanied with itching over the whole arm, as is not seldom the consequence of cutaneous irritation by blisters; the symptoms passed off spontaneously.

On the 28th of January, a new irritation, redness and itching at the vesicated place was observed. On that day the redness was of a dark and coppery shade, and the vesicated place firm and infiltrated, more especially at one of the lower angles. At the same time some tuberculous eminences were recognizable. No pain.

Feb. 10th. The vesicated place was covered with reddish-brown, firm tubercles, grouped and covered with thin scales. Those that first appeared had thicker and darker scabs, from the exsiccation of matter superficially formed.

Feb. 18th. (Forty-second day of inoculation.) Some of the tubercles much larger, projecting more, and are covered with laminified scabs, resembling those of rupia. Below them there is suppuration. The cutis yet firm and infiltrated, particularly towards the margins of the vesicated spot. Some tenderness along the ascending lymphatics; some axillary glands painfully swelled.

An attempt was made with iodide of mercury (10 grains to the ounce) to subdue the apparently still local symptom, and in the beginning the attempt seemed to be successful. The tubercles grew rapidly smaller. The firmness of the skin evidently changed its consistency. At the end of a fortnight only the larger tubercles remained visible. After the ointment had been for some time discontinued, a new increase of the symptoms took place on the 14th of March, being the seventieth day after the inoculation. The infiltration increased again, and luxuriant but dry tubercles sprang up. Another attempt was made to arrest the constitutional invasion by applying a paste of chloride of zinc and starch. The slough removed the affected portion of the skin, and its detachment was accompanied by copious suppuration and healthy granulations. The cicatrization soon followed.

June 12th. Up to this day, which is the one hundred and fifty-ninth after the inoculation, and the one hundred and thirtieth since the first appearance of local symptoms, the patient had been constitutionally well. But now a general feeling of indisposition began, with a moderate gastric derangement, headache, and want of sleep. A week later a spotted redness about the tonsils and soft palate was noticed, which were soon covered with grayish white, apparently granulated exudation. Eventually, those spots ulcerated. A similar change was noticed also inside of the lower lip; another on the left of the frenulum lingue. The cervical glands were swelled. At a still later period, the scrotum became the seat of red infiltrated, secreting, superficial rhagades, (tubercles muqueux.) A treatment with corrosive subli-

mate and proper diet effected in a few weeks (15th July) a cure, and up to the 20th November no manifestation of further trouble appeared.

15. Dr. Flint carefully reports fourteen cases of phthisis, in which the use of the chlorate of potash was impartially tried as a remedy. He concludes as follows:

1. Of fourteen recorded cases of phthisis, in which the chlorate of potassa was given in sufficient doses, ($3ss. per diem$ in eleven, and $3ij.$ *per diem* in three cases,) and for a sufficient period to test its remedial power, in nine the histories afford no evidence of any salutary influence from the remedy; in four cases the circumstances render it doubtful whether much, if any, influence was fairly attributable to the remedy, and in one case only is there room for the supposition that the remedy was highly beneficial. These cases, therefore, fail to furnish proof of any special efficacy in this remedy to arrest or retard the progress of the disease.

2. Inasmuch as in all these cases, save one, the quantity of tuberculous deposit was large or abundant, and in nearly all the disease had existed for a considerable period, it remains to be ascertained by further clinical researches whether different results may not be obtained by the use of the remedy in a series of cases in which the quantity of deposit is small and the previous duration of the disease short. In collecting such cases, accuracy of diagnosis is, of course, essential, and this can only be secured by the evidence afforded by physical signs in conjunction with the previous history and present symptoms. It may be added, in arriving at the conclusion that this remedy possesses no special influence in phthisis, it does not follow that it is not in a certain number of cases useful. By a special influence is meant a power to control, to a greater or less extent, the pathological processes which belong to this disease; a remedy may fail to do this, and yet be beneficial, as are a diversity of tonic remedies in cases of phthisis.

3. The chlorate of potassa may be given in cases of phthisis to the extent of half an ounce *per diem*, with entire impunity, and without occasioning any unpleasant symptoms. It does not produce diarrhoea, and may be well borne when diarrhoea is present in cases of phthisis.

16. This is an elaborate and highly creditable essay, but of such length that our space admits nothing more than a *résumé* of the results deduced from the experiments performed by the author.

Résumé.—In the foregoing essay, I conceive that I have established the following facts, which are either not generally admitted or not understood by physiologists:

First.—That the heart elongates during the systole of its ventricles.

Second.—That the cause of the rhythmical contraction of the muscular fibres of the heart is resident in the fibres themselves, is one of their inherent properties, and remains so long as they retain their "irritability." That it is derived neither from the cerebro-spinal nor sympathetic system of nerves.

Third.—That the natural stimulus which excites the regular and effectual movements of the heart is the blood, and that this cannot be replaced by a fluid of less density.

Fourth.—That though the flow of blood in the cavities of the heart is sufficient to induce, under ordinary circumstances, regular contractions of the organ, still it is necessary that these movements be further regulated and controlled; and that this is effected through the agency of the pneumogastric nerves.

Fifth.—That the action of the heart may be arrested, through the motor filaments of the pneumogastric nerves, by means of galvanism; that this does not take place in animals poisoned by woorara, on account of the paralysis of the motor nerves. That the motor filaments of the pneumogastrics are the last which are affected by this agent, and that in the alligator they are left almost intact. That the cause of the arrest of the heart by galvanization of the pneumogastrics is the exaggeration of the force which regulates the action of the heart, rendering it slower and more powerful.

Sixth.—That in asphyxia, the cause of the arrest of the action of the heart is overdistention of its cavities; and that anything which brings about a sufficient amount of distention will equally arrest the action of this organ.

Seventh.—That the auriculo-ventricular valves are closed by a backward pressure operating during the contraction of the ventricles, and not by the current of blood from the auricles to the ventricles.

Eighth.—That the excitation which gives rise to the reflex phenomena of respiration is received from the general system, and not from the lungs or heart. That this excitation is due to the want of oxygen in the tissues, and not to stimulating properties in the venous blood. That the exaggeration of this excitation constitutes the sense of suffocation, and gives rise, if excessive, to general convulsions.

17. Obstetric writers, with very few exceptions, have attributed the formation of the knots which are occasionally found on the umbilical cord, at birth, to a change in position of the foetus while in the uterus. This may take place either from its own movements, or from

some movement communicated to it by the mother. In this way, passing through a loop of the cord, it forms the knot, which may be tightened by the further gyrations of the fetus, or remain loose till delivery. Practically the subject is of no importance. The very nature of the complication effectually prevents any measures to protect the fetus from the dangers which may arise if the knot should tighten. But while granting all this, and admitting that nothing we can do will prevent their occurrence, it may be well to examine into the evidence upon which the general belief, as to their formation, is based; to determine whether it rests upon good foundation, or is one of those fallacies, so many of which, like the rubbish which disfigures the proportions of many a stately fabric, are to be found in the writings of obstetric authors, and which have been handed down from one generation to another, and passed current because they have never been questioned.

After a course of reasoning to prove that it is irrational to suppose that these knots can, with impunity, occur before parturition, and an examination of the evidence on the subject possessed by the profession, the Doctor ends thus:

If the argument thus set forth is sound, and a case does not occur in which, while yet *in utero*, a knot is found tied upon the umbilical cord, and of which, so far as any records at hand have been consulted, no instance has been found, the opinion held by many members of the profession as to the mode in which they are produced is erroneous, and the only way they can be tied, and the time when they can be formed, must be by the passage of the child through a loop of the umbilical cord lying around the os uteri when it is ushered into the world.

18. The conclusions of the Committee, which were arrived at, evidently after great labor and research, and after comparing the experience of a number of physicians who had, at their request, experimented with, are, that the veratrum viride is one of our best (if not the best) arterial sedative.

The time has most surely gone by when the value of the veratrum viride, as a medicinal agent, is to be regarded as hypothetical. It has been used by thousands of physicians fully competent to make observations with discrimination and sound judgment. The strongest and most conclusive testimony relative to its great value comes from those who have used it the most, and who are, therefore, the best prepared to express an opinion.

Some of them feel as though they could not get along without it,

especially in view of the fact that with it they have saved patients whom they think they must have lost without it. But there are others who will not believe in its value, and make a fair trial of it. They either sneer at it, or pretend to be afraid of so potent an agent. And yet, among all the cases that have been recorded throughout this whole country, can a single instance be mentioned where serious harm has been wrought by its use? Of which of our other potent remedies can this be said? The failure or success of this or any other medicine, in a single case, proves nothing for or against it. It is the result of repeated trials that is to establish its value and certainty of action. Nevertheless, there are men who, having used it with trepidation and misgivings in one or two cases, without seeing the effects ascribed to it, have thrown it aside, and pronounced it worthless. But it matters little who now remain skeptical in respect to the great value of the veratrum viride as a medicinal agent. It has been used extensively, and has vindicated the reputation given it, to the satisfaction and admiration of intelligent men all over the country, and supplied a want that nothing hitherto has done.

The chief diseases in which it was employed by those reporting in answer to the request of the Committee, were—pleurisy, pneumonia, scarlet and remittent fevers, measles, asthma, convulsions, ovaritis, metritis, affections of the breasts, and, in fact, in most of the cases in which excessive heart action indicated a sedative or relaxant.

We know very well that there are cases where it fails of producing the ordinary good results to be expected from it; but this militates nothing against its value. The same is true of all our most prized remedies. Why, then, should any one throw the veratrum aside as worthless, because it did not do all he anticipated in the first or second trial? The fault may have been in some idiosyncrasy of the patient, or in an inadequate dose for that particular case. Were there no exceptions, did the medicine *never* fail, it would indeed be a specific. But the experience of the whole medical world tells us that no specific has as yet been discovered, and it is foolishness for any one to expect that there ever will be. A use of the article will show that it is as certain of producing its peculiar effects as calomel, or any other agent of the *materia medica*.

The preparation employed was the tincture, and the dose for adults generally five drops, repeated about every three or four hours. The following are some of the cases given in illustration of its action by those replying to the Committee:

By Dr. Ruppaner, of Boston:

"CASE II. A merchant, aged twenty-two years, with advanced phthisis. Had had repeated attacks of haemoptysis. Pulse 118-120 per minute. With five drops of the tincture of veratrum viride, thrice daily, the pulse was reduced to 85 per minute, and kept there steadily day after day. Continues the veratrum daily."

"CASE III. A little girl, aged one and a half year, had whooping-cough, followed by pneumonitis. One drop of the tincture of the veratrum viride, given every four hours, succeeded admirably."

"CASE IV. An infant of eleven months, had scarlatina. During the febrile stage, one drop of the tincture of the veratrum viride, with syrup of squills, four times daily, reduced the pulse readily."

Dr. Allen, of Cambridgeport, says:

"In all cases I order small doses much diluted, every hour, until the arterial action has very much lessened, and for three reasons: 1st, it is more willingly taken, especially by children; 2d, less danger of overdosing exists; and 3d, very much diluted it is more readily absorbed and more quickly effectual."

Dr. Otis E. Hunt, of Weston, regards it as a valuable medicine. His manner of using it has been to give five drops of the tincture every thirty minutes till the pulse fell. He says a few drops would sometimes accomplish the object, and at other times a half dozen would be required. He has found it very apt to produce nausea.

Dr. Enos Hoyt, of Framingham, writes that he has used the veratrum viride in the apoplexy of aged people and those of enfeebled health, and finds it better than blood-letting, as the recovery is better. Has given as high doses as twenty to forty drops in four cases that came under his care, which resulted in recovery—which was heroic treatment. He thinks he has derived much benefit from its use in scarlatina, and he learned while at the South that the physicians there were using it with good results in the same disease. Where arterial excitement needs reducing it is decidedly better than digitalis. He says he likes it in measles, pertussis, and parotidea.

19. This article is devoted to proving by the evidence of experiments that the salts of morphia, in combination with strychnia, prevents the color-test from being effectual; that this depends upon the relative quantities of the two alkaloids, (*e. g.*, the strychnia being not discoverable when the morphia is in excess, and barely discoverable when in equal quantity;) and lastly, the extraordinary delicacy of the color-test when not interfered with by the presence of morphia.

The next point to be briefly noticed is the extraordinary *delicacy* of the color-test. It is this which gives to it its chief value. As the result of a great number of experiments made for this purpose, I have been enabled to detect with distinctness a smaller quantity than the *half-millionth* part of a grain, (the precise amount was the 1-672,000th of a grain;) and on some occasions, when experimenting on as minute a portion as the *one-millionth* of a grain, I have obtained a momentary flash of the peculiar blue color—faint, to be sure, but to the practiced eye positive and real.

It is to be understood that these minute quantities of the poison can be discovered only when it is in the pure state, and free from all other organic admixture. Of course it would be in vain to attempt to detect anything like such infinitesimal portions in mixtures like the contents of a stomach. But, as I have already shown, there is no difficulty of discovering as small a quantity as the *one-hundredth of a grain*, (and doubtless even less,) when diffused in a pint of complex organic mixture.

I will add a few words in relation to the best mode of proceeding, when we desire to test for extremely minute portions of pure strychnia.

A solution is first made of any given quantity—say one-tenth of a grain in a fluid ounce of distilled water, with a few drops of acetic acid to insure solution. The number of drops contained in the portion of liquid is to be ascertained by means of a pipette, prepared by drawing out a glass tube to a fine point. The solution may then be diluted to any degree required. One drop of the liquid, representing the ascertained fractional part of a grain, is then to be placed upon a small, perfectly clean, white porcelain capsule, and evaporated to dryness, either in the sun or by a very gentle heat. When cold, a drop of pure sulphuric acid is to be placed, by means of a glass rod, on the capsule alongside of the dry spot, but not in contact with it. Next, a small crystal of bichromate of potassa (or, preferably, of ferrocyanide of potassium) is to be laid on the dish; after which, a clean, dry, and finely-pointed glass rod should be drawn through the drop of acid, so as to bring a very little of it in contact with the spot; the little crystal is next to be moved by the rod once or twice over the moistened spot, when there will immediately appear, flashing out, as it were, the characteristic blue color—more or less transient, according to the amount of the alkaloid present, and passing through the usual tints.

With reference to the strychniасopic qualities of the frog, Dr. Reese says:

In experimenting with frogs with a view to determine the presence

of strychnia in minute quantities, it is advisable to make use of very small animals—those, for example, whose bodies measure from an inch to an inch and a quarter in length, and which would weigh from twenty-five to fifty grains. The simple method which I adopted, and which I found to answer extremely well, was to put a small quantity of the strychnia solution—about a fluid drachm, or even half that quantity—into a deep conical glass vessel, such as an ordinary pint graduate measure, and then place the frog at the bottom. The shape of the jar insures the required immersion of the hind legs and body of the animal in the liquid, while the head remains perfectly free for breathing. Any efforts to escape are usually prevented by the sides of the vessel; or, if necessary, it should be pushed down again into the fluid—the object being to insure continuous contact. The subjoined experiments were undertaken by me with the two-fold view, first, of comparing the value of the frog-test with the other strychnia tests; and secondly, of ascertaining if the presence of morphia would produce any modification of the usual effects of strychnia on the frog.

Expt. 1. A frog weighing 45 grains was put into a solution of strychnia, one drop of which contained the 1-13,500th of a grain—(equivalent to about one grain in twelve fluid ounces.) Convulsions were produced in four minutes.

Expt. 2. A solution of one-half the strength of the preceding (or one grain in twenty-four fluid ounces) affected a frog weighing 40 grains in five minutes.

Expt. 3. A solution of one-half the strength of Expt. 2 (or one grain in forty-eight fluid ounces, or three pints,) produced spasms in a frog weighing 28 grains in five or six minutes.

By bringing to his aid the sensitive nervous system of these little animals, he was able to detect the presence of the *half-millionth of a grain* to each drop of water used in the experiments; and one advantage possessed by this test is, that the presence of morphia does not interfere with it.

20. *Fatal Parturition from Inertia of the Uterus—Fetus not delivered.*—Dr. Corse read the following note of this case, and exhibited the fetus and its membranes with the uterus: Mrs. A. P. was taken in labor at a period which she supposed to be the close of the eighth month of pregnancy.

The uneasy feelings usually preceding labor began gradually, and continued for several days, without any increase of the pain or uterine contractions. She at length began to feel spells of sinking and prostration, which were at first slight and of short duration, but

gradually became more marked and of longer continuance; their recurrence also became more frequent. No haemorrhage whatever took place, not even the usual amount which sometimes constitutes the show of obstetricians. I was sent for in consultation; but a few minutes before I arrived, one of her sinking spells came on, in which she expired.

Her color at that time was exceedingly pallid. No patches or spots of purple or deep red appeared, as in cases of purpura and some other diseases, incident to a low state of the system. The body was plump, and the skin free from the shrunken and wrinkled state which it presents sometimes in cases of death from extreme prostration or exhaustion. She had had no diarrhoea or other exhausting discharge. A moderate quantity of food had been taken daily, and she had had a tolerable amount of sleep in short naps, but no long or refreshing sleep at any one time for several days.

The emotional system being depressed, for some weeks before her death she had been laboring under dejection of spirits. No good reason could be given to account for this, and we are left to suppose it to have been, for the most part, due to the remembrance of a former labor about two years before, from which she narrowly escaped with her life. In that labor she had had a placenta praevia, and was reduced by the haemorrhage to the last extremity, and lay many hours after delivery before reaction could be brought about. I was with her on that occasion, in consultation, and delivered the infant by version from a vertex presentation to a footling. Soon afterwards some of her lady acquaintances very indiscreetly predicted that, if she should ever become pregnant again, she would surely perish in the delivery. It is not positively known that this preyed upon her mind, but she was meditative in her character, and of taciturn habits. No other cause for depression of spirits is known to have existed.

Permission for a *post-mortem* examination was obtained, in hopes of finding some other cause of death, but our expectations were disappointed.

Case of Cold-Stroke.—Dr. Henry Hartshorne gave a brief account of a case of fatal illness following sudden exposure to cold for a short time.

J. S. H., aged 14, previously in ordinary health. On the night of the 7th of February, (on which day the thermometer had gone down nearly 50° Fahr. in twelve hours, with the rise of a piercing wind,) he rose from his bed in the back chamber of a large house, and went, barefoot and in his night-shirt, to the window of the adjoining front

room, which he opened and stood by for a few minutes, looking out, on account of an alarm of fire. Being thus thoroughly and suddenly chilled, he had some symptoms of indisposition the following morning, but became more ill as the day advanced. Dr. H. H. saw him about 5 p. m.; at which time he was suffering with headache, drowsiness, and vomiting; the skin moderately hot; the pulse hard and accelerated. A saline laxative had produced two evacuations of the bowels. Fourteen leeches were directed to be applied to the back of his neck, cold cloths were placed upon the forehead, and the solution of citrate of potassa was prescribed.

At about 4 o'clock of the succeeding morning he died. A *post-mortem* examination could not be obtained.

After careful inquiry, it was impossible to discover any probable cause for this sudden and rapid illness except his exposure, upon leaving a warm bed, to the piercing wind of a cold winter's night.

Probably the rapid and extreme change of temperature disorganized the minute elements of important structures, especially of the brain; in a mode analogous to that in which congelation, especially when suddenly succeeded by the thawing process, destroys the vitality of plants.

21. A few weeks ago I met with a case of coccydynia of ten years' standing, in a woman about thirty-two years of age. She suffered very severe pains in the region of the coccyx, whenever she attempted to sit down or to resume the erect posture, or to walk about. She could not lie down in bed or rise from it without the assistance of some one of her family, nor was she able to sit down on and to rise from a chair without taking hold of the back of the chair or some other object. Still, the least painful posture for her was to keep bent to a certain degree, as if in the act of sitting. While sitting on a chair and lying on her bed, she experienced a very disagreeable, dull, burning, and prickling sensation, which was frequently unbearable. She suffered excruciating pains when her body was swayed from side to side; the gluteal and coccygeal muscles of both sides seemed mostly to trouble her, but especially on the right side, to which the coccyx was somewhat drawn. She dreaded to sit down, and dreaded to rise up—dreaded to get into bed, and dreaded to get out of it. As she did not complain when her bowels were being moved, the tendons of the sphincter and the fibres of the levator ani did not appear affected; the disease seemed to be mostly confined to the gluteal and coccygeal muscles, and also perhaps to the sacro-sciatic ligaments, which produced traction. The patient states that she cannot tell

how the affliction came on, nor what caused it. She relates that she consulted a dozen of the best physicians in Tennessee, (where she used to live,) under whose treatment she successively was for a good while, without deriving any benefit from it, and finally they pronounced her incurable.

Whilst I was attending on a member of her family, she told me her affliction; and the symptoms of coccydynia, as described in the lectures of Professor Simpson, which I had read in your *Monthly News and Library*, were so striking and plain in her case, that I offered to cure her. I proposed to perform the operation recommended by Professor Simpson, the isolation of the sacro-vertebral bones from the surrounding tissue by means of a tenotomy-knife, (see *Simpson's Clinical Lectures on Diseases of Women*, Am. ed., p. 216,) to which she readily consented. I performed the operation on the 18th of April last. The relief was effectual, instantaneous, perfect, and I hope permanent. The wound is healed up, and she feels very well. The patient continues to be perfectly free of pains.

22. Drs. Rochester and Wyckoff each reported a case of acute rheumatism, terminating fatally from apoplectic coma. Dr. Wilcox stated that he had reported a similar case some time ago.

23. *Marine Baths for Scrofulous Infants*.—The administration of Public Charities of Paris, during the last summer, established an hospital for scrofulous children at Berck, on the English Channel. It is a structure built of wood, forming a parallelogram, opening on the sea, with a chapel in the centre. The number of beds is confined to one hundred, and the whole is under the surveillance of Franciscan Sisters, from Calais. Before being sent there from Paris, every child is properly examined, and ticketed with a history of its sanitary condition; and when about to return to Paris, the child is, in like manner, accompanied by a description of the treatment it has undergone.

The Lamp Bath.—The following is a very simple and most effectual method of exciting the functions of the skin. Let the patient, *in puris naturalibus*, be seated on a common wooden chair, with his feet upon a low stool, the body then enveloped in two or three blankets, the head being excluded, and a large spirit-lamp placed under the seat. In about a quarter of an hour, the perspiration streams down the skin. After a time the blankets must be removed, and the patient subjected to a douche of two pailfuls of cold water, and then dried with much friction; after which, a smart walk may be taken.—*Dr. C. Taylor*.

24. Miss E. B., aged 45, went to bed as well as usual on the even-

ing of December 31st, 1860. The next morning at six o'clock she wished her niece a happy new year, and was apparently well, but in half an hour afterwards she was found insensible in her bed, and supposed to be dead; was pronounced to be so by a homœopathic physician, who was immediately called. At 10 A. M. she was taken from the bed while still warm, attired in grave-clothes, and left lying in a room, the windows of which were left open, while the thermometer was below the freezing point, where she lay until 10 A. M. on the 2d of January, at which time I was called. I found the body still warm; the countenance like that of healthful sleep; the skin felt remarkably warm and life-like; the eye had the brightness of health; the jugular veins were gorged with blood; no rigor mortis existed; an indistinct fluttering could be scarcely perceived on placing the ear over the heart; no pulse existed at the wrist, nor in the temporal arteries, and no respiration could be perceived. I immediately placed her in a warm bath, opened the right jugular vein, from which the blood flowed freely; drew a half pint, and found it difficult to arrest the flow completely. She was taken from the bath and wrapped in flannel; friction was applied to the skin, and vessels of hot water to the extremities. Electricity and artificial respiration were employed, but our exertions could not arouse further signs of life.

Autopsy.—January 3d, at 2 P. M. Body still warm; rigor mortis slightly marked; odor of decomposition slight; the pneumogastric nerves were galvanized in extreme precaution, and the body opened. The brain was perhaps softer and yellower in tinge than normal, but no evident lesion existed. The longitudinal sinus was filled with fluid blood; the medulla oblongata was healthy; the larynx, bronchial tubes and tissue of the lungs were normal; the heart was healthy, except that the left auriculo-ventricular valve was thickened; the pericardium contained about an ounce of liquid; the liver, kidneys, stomach and intestines were healthy; a small fibrous tumor, about a half inch in diameter, existed in the posterior wall of the uterus; the ovaries were filled with small cysts. The most singular appearance was found in the spleen, in which the malpighian corpuscles had not disappeared, as is usual a short time after death, but were large and crowded, so as to give a whitish color to the section of the organ. The blood which had been drawn from the jugular vein the day before had not coagulated, but the corpuscles had subsided, leaving a layer of straw-colored serum above them.

25. The patient was perfectly conscious on her arrival at the hospital, and had strength enough to walk to the water-closet with but

slight assistance. She stated that she had been unwell for five weeks past, but did not describe her symptoms. The whole surface of the body and limbs, with the exception of the abdomen and inside of the thighs, was cold, but the patient complained of feeling hot, and of a burning pain in the lumbar region. Soon after her arrival she vomited some pure blood. As the girl seemed almost asphyxiated, Dr. Cabot was sent for, who opened the trachea, and inserted a large double canula, after which the breathing became perfectly free, and the pulse grew stronger and fuller. The patient now began to call for cold water in large quantities, and would almost refuse a smaller amount than a tumbler-full. After the operation, she continued to vomit, with much retching, bringing up a bloody-looking fluid. She likewise called for the bed-pan, and used it frequently during the night. The dejections were for the most part fluid, containing apparently blood, mucous membrane, and a thick scum. The dejections and matters vomited resembled each other, and were so peculiar that they were saved. The resonance of the chest was everywhere good, but sonorous râles were heard in all parts of it. The pulse soon began to fail again, and the skin grew more and more livid, until it became everywhere of a dusky hue, although the air passed in and out of the tube freely. She remained conscious till her death, at 10 o'clock, 25 minutes, A. M.

Autopsy.—*Stomach* moderately distended, somewhat œdematosus, externally. Peritoneal coat shining and healthy. No perforation. The upper (œsophageal) portion of mucous coat, for the space of four inches in diameter, was of the same color as that of the œsophagus. The pyloric portion, particularly at the depending part of the organ, was thickened, of a dark-brown color, and traversed by numerous high rugæ. The mucous and submucous tissues were almost gangrenous, and very friable. The stomach contained about seven ounces of dark, reddish-brown fluid.

Small intestines of a very pale pink color, externally, but polished and glistening. The mucous membrane was reddened from the pylorus to the cœcum. The reddening was most marked near the pylorus, but there were occasionally spots the size of a dollar, of a brown color, and almost gangrenous. The mucous and submuconous tissues were not, on the whole, much inflamed.

A Practical Treatise on the Diseases of the Sexual Organs of Women.
By F. W. VON SCANZONI, Prof. of Midwifery and Diseases of Females in the University of Würzburg; Counselor to his Majesty the King of Bavaria; Chevalier of many Orders. Translated from the French of Drs. H. DORR and A. SOCIN, and annotated, with the approval of the author, by AUGUSTUS K. GARDNER, A.M., M.D., Prof. of Clinical Midwifery and Diseases of Women in the New York Medical College; Author of the Causes and Curative Treatment of Sterility; Editor of Tyler Smith's Lectures on Obstetrics, &c. New York: Robert M. De Witt, pp. 669. 1861.

(Continued from October No., p. 297.)

Leaving these general considerations, we now arrive at the "Pathology and Therapeutics of Particular Affections of the Womb," and passing in review absence and malformation of this organ, (the former of which the author has never met with,) defects in development, constrictions and obliterations, atrophy and hypertrophy, we come to the important subject of flexions, to which alone thirty-four pages are devoted.

To the subject of flexion the author has evidently given much attention, and we lay the most interesting points of his publication on that subject before the reader in the following paragraphs:

The frequency of fibrinous adhesions attaching the flexed uterus to surrounding parts, led Virchow to regard peritonitis as the cause of the accident, the effused lymph contracting and drawing the uterus down. Scanzioni regards peritonitis as a consequence, and not a cause.

The ordinary seat of flexion is opposite the os internum; here in one case I found fatty degeneration of uterine structure; in two old women complete obliteration of cervical canal; in one menstruant woman almost complete closure; and in another $\frac{5}{2}$ of blood were found shut up in utero.

Premature labor or abortion are great causes of flexion; thus, in more than 22 per cent. of all his cases, it had occurred. Operative interference at full term is often called for in cases which afterwards suffer from it, and probably multiple pregnancy also.

Rising too soon after delivery is a great cause, as also too rapidly succeeding pregnancies. In fact, all the circumstances concomitant with parturition have a marked connection with the etiology of the affection, among which he enumerates, also, abstaining from suckling as of some importance in producing it, by reason of certain desirable changes in uterine contraction and involution not occurring as perfectly as they do when the mother nurses her child. Early marriages

before the uterus has been fully developed, and external causes which result in depressing and cramping the organ, may likewise produce it.

Although the author admits that alterations in the uterine tissue result in serious trouble, he by no means regards the simple flexion of the organ as likely to give rise to alarming symptoms.

"So we are at present convinced that flexions of the womb do not acquire any importance, nor are followed by any serious dangers, save when they are complicated with an alteratioa in the texture of this organ.

"We know perfectly well that at present we are almost alone in professing this opinion. It is for this reason that we think it our duty to explain here in detail the reasons which have induced us to publish it."

His reasons for first doubting the old and accepted views were the fact that in menstruating females he found the organ completely flexed, without a single unfavorable symptom to proclaim the abnormal condition existing.

"This fact is notable proof of what we have advanced. Pure and simple flexion, without complicaion, may often exist, if not always, without any bad results to the health. A multitude of other cases have shown us that no special troubles, either general or local, are produced by this affection, except when to it is joined an imflamatory tumefaction of the body of the uterus, a well-marked relaxation and softening, with hypersecretion of the mucous membrane, deep ulcerations of the os tinea, and repeated partial peritonitis.

"Further, the frequency of these complications of flexion must at first sight make it presumable that the latter favors these secondary alterations. In truth, we are convinced that every flexion, so soon as it has arrived at a certain degree and a certain duration, must necessarily occasion changes in the texture of the parenchyma and mucous membrane of the uterus. It is only thus that this anomaly of the uterus acquires, in a practical point of view, any great importance. The majority of authors seem not to have appreciated this fact at its just value."

This fact, extremely interesting in a pathological point of view, is not as important, practically, as one would at first suppose, for just afterwards the author admits that "flexion eventually, almost necessarily, induces alterations in the structure of the womb." That is to say, although flexion, pure and simple, does not produce annoying symptoms, it is "almost necessarily" followed by certain pathological conditions—engorgement, effusion into the uterine structure, erosions, and even inflammation.

In speaking of the means of diagnosis of this accident, he reiterates his aversion to the use of the uterine sound, and again signalizes its dangers. It should be employed, he thinks, only when all other means of diagnosis fail, and then "the sound ought in every case to recognize a flexion in the following manner:

"At the moment when the extremity of the instrument passes the place of the flexion, the organ is replaced and resumes its normal position, so that it escapes from contact with the finger, and the tumor which was perceived through the vaginal walls suddenly disappears."

Had the author not stated that he rarely employed the uterine sound, the fact would be very strongly suspected by any one who has used it frequently, by simply glancing at this passage. It may be true in theory that the sound "ought" to do this, but every one knows, who has much experience with it, that it does not do so, but that its direction has to be changed, until "*en tatonnant*" cautiously the course of the deflected canal is found; and then, too, it is by no means so easy, in every case, to replace the organ as one would be led to suppose by the passage we are considering. This view, founded upon theory, is so apt to lead a beginner into error; so apt to disappoint him with a useful instrument, that we notice its inaccuracy particularly.

Thus far in his very able dissertation upon Flexures of the Uterus, M. Scanzoni has expressed very fully all that is known and believed by American gynecologists, but here he ceases to do so; and we believe ourselves entirely within bounds when we declare that, in the treatment of that annoying and unmanageable class of affections, the daily practice of this city is capable of making valuable additions to his armamentarium.

"Flexions are among the most protracted and obstinate diseases of the womb. In spite of what many modern authors have said, we are persuaded that if what is called the powers of nature do not effect a cure, the malady will completely resist every form of treatment, whether medicinal or mechanical. For our part, we have never cured a flexion; when we have seen one disappear, it was not to our efforts that we could attribute this fortunate termination. And this does not appear astonishing when we attentively consider the causes and mode of development of this affection. Preceded and favored by a relaxation of the uterine parenchyma, it makes such slow and imperceptible progress, that it is not until it has attained a very considerable degree that it provokes symptoms sufficiently marked to be recognizable. Then the disease is constantly aggravated by the alterations of tex-

ture which occur to complicate it. According as the flexion increases, the uterine tissue of the concavity of the flexion grows thin and softens. By what means can a physician cause the anomalies of texture which we have described to disappear?"

Now, let us answer the question contained in the last two lines by another. Curious disease attacks a spinal vertebra, and it rapidly crumbles; "by what means can a physician cause the anomalies of texture we have described to disappear?" By applying, after the methods of Davis, Woods, and others, artificial support, leaving the weak part idle, and thus enabling it to recuperate. Thus, too, would we act, and thus have we often successfully acted towards the uterus.

But the author objects to intra-uterine pessaries, on account of their danger; so do we. To the experiments of Valleix, of Paris, to which he alludes, we were an eye-witness, and the result was to give us a great fear of that class of uterine supporters; but besides these he mentions no other, and this is the point at which we separate. There is a kind of pessary commonly employed in this city, and known, I believe, as Hodge's pessary, which consists originally of a ring of hard rubber, which, being heated in warm water, admits of being bent, so that one portion running up into Douglas's *cul-de-sac*, supports upon itself the flexed fundus, while the other presses against the symphysis. Or the instrument may be made of block tin, and bent so as to accomplish the end in view, at the same time that an indentation at that point where the urethra passes prevents obstruction of that canal.

Should the flexion be great, by altering the shape of this pessary it may in great measure be relieved in most cases; and should it be so slight that the instrument does not reach the flexed portion, according to the showing of M. Scanzoni himself, no evil symptoms will arise, and hence relief will not be called for.

But our author does not, while he distrusts mechanical means, advise an entirely Fabian policy; for although he thinks the employment of "internal medication of no efficacy against uterine disease proper," he asserts that "the cold douche, cold hip-baths, vaginal injections, lavements of ergot given two or three times a week, will be found useful in these cases. It will only be in exceptional cases, when the blennorrhœa of the cervical mucous membrane may be very intense, that recourse need be had to cauterizations by means of a stick of nitrate of silver introduced into the neck. In this manner, at the end of six or eight weeks, we shall generally succeed in very much ameliorating the condition of the uterine parenchyma, in such a manner that

the abundant menorrhagia and the leucorrhœa shall either completely disappear, or at least be greatly diminished. If this should not be the case, we advise recourse to a procedure which may perhaps at first be thought to be very absurd, but which, however, has, on various occasions, rendered us most valuable services in menorrhagia; we refer to local blood-letting. Every week or two, three or four leeches should be applied to the os tineæ. The stasis of venous blood, which is the cause of the friability of the uterus, is thereby moderated; the circulation regulated, the absorption of the serous elements of the tissue diminished. Thus, the organ resumes in a little while more tonicity. We cannot too highly recommend this method, which numbers of times has served us in successfully combating a tendency of the uterus to haemorrhage which had obstinately resisted every other mode of treatment.

"These emissions of blood have produced also the best results, when, besides a flexion of long standing, the uterus is more or less engorged and indurated. Their action is seconded by the use of hip-baths and injections of natural or artificial marine waters; they should be taken twice a day, and may be warm, if the flexion is not accompanied by profuse haemorrhages, which in these circumstances are not uncommon; but should be cold, if the contrary is the case. Should the pecuniary circumstances of the patient admit, she may be sent during the summer months to take the baths at Kissingen, Kreuznach, Reichenhall, Ischl."

He likewise advises keeping the functions in proper activity, wearing an abdominal bandage, attending to nutrition, &c., &c.

The subject of *Prolapsus Uteri* is treated of very ably and completely; and special attention is given to the pathological condition of the displaced organ.

"Then, if the body of the uterus is opened with scissors, a considerable hypertrophy of the parenchyma of this organ is observed, and an attentive examination demonstrates here the same pathological alterations which we shall hereafter describe in speaking of chronic engorgement of the womb. The cavity itself is always considerably dilated, especially in its longest diameter, and the mucous membrane shows all the characteristics of chronic catarrh."

"In such cases micturition is often painful, and sometimes even it is not possible, except when the patient has with the fingers pushed back into the pelvis, and retained in this position the tumor situated in front of the vulva. Little by little the portion of the wall of the bladder directly behind the neck of this organ undergoes a depression;

it thus forms a furrow, in which, by reason of its dependent position, the urine is collected and decomposes; this irritates the mucous membrane, and often gives rise to a catarrh, or even to a croup-like inflammation, which extends over all the surface of the mucous membrane of the bladder and the urethra. This displacement of the bladder is recognized with certainty by introducing a male catheter considerably bent; in fact, when we wish to introduce it with the concavity upward, an obstacle is generally met with, while the catheter enters very easily when the concavity is turned downward and backward. The point of the instrument can then be perceived upon some spot on the anterior part of the tumor situated in front of the vulva."

The following are the causes of prolapsus enumerated:

- Relaxation of ligaments, (especially after parturition.)
- Relaxation of vagina.
- Rising too early after labor.
- Rupture of perineum.
- Blows, falls, strains, &c.
- Increased weight of uterus.
- Increased pressure from above.

In differentiating prolapsus, he calls attention to the fact that it may be confused with hypertrophy and elongation of the cervix, of which he says in a previous part of the work:

"In certain cases, the os tincæ attains to the length of six inches and more; it then hangs outside of the vulva, and might, to a careless examiner, resemble a complete prolapsus of the uterus. It has the form of a cylinder or a cone, sometimes even of a wedge. Its surface is smooth, or covered with numerous little depressions of the size of a grain of millet-seed, with funnel-shaped openings penetrating into the depth of the tissue, where they communicate with little *cul-de-sac* cavities, of a variable size, and produced by an enlargement of the glandules. These cavities are generally filled with a gelatinous mucus.

"After the learned researches of Virchow, it is placed beyond a doubt that the presence of these glandular enlargements has an important influence in the development of the species of hypertrophy now occupying our attention. We have often observed this anomaly. In two cases of amputation of the hypertrophied portion, which were followed by a very copious haemorrhage, we were able to convince ourselves of the accuracy of the assertions of Virchow, who says that the polypiform prolongations of the os tincæ are always very rich in arterial vessels. Very often the disease is limited to one of the lips of the orifice."

After the organ has been replaced, he advises the treatment of the cause of displacement, if it can be reached, and then, "As soon as the reduction of the uterus is effected, the next object is to retain it in its new position. For this purpose, different apparatus have been invented, known under the names of pessaries and supporters. But from frequent experience in such matters, we are convinced that none of these instruments are equally applicable in all cases, and that one will never be invented capable of fulfilling all these necessary conditions. One of the first reasons is, the different degrees of sensibility possessed by the affected parts in different individuals. In fact, while some tolerate without any inconvenience very hard instruments, compressing and considerably dilating the walls of the vagina, the introduction of a soft sponge dipped in oil is insupportable to others. Another reason is, that, in constructing instruments of this sort, the attention is ordinarily fixed on one only of the numerous causes of prolapsus, so that in cases where the malady proceeds from any other cause, the apparatus is unsuitable.

"On this account, we make it a rule never to lose sight of these two considerations in choosing an apparatus for the support of the uterus, and never to adopt one which would render difficult or impossible the use of those topical remedies which are so necessary to a permanent cure."

The pessaries advised by him are those of Roser, Zwanck, Schilling, and Gariel. The ring pessary of Meigs, the lightest and most effectual we have ever employed, is mentioned neither by the author nor editor.

In reference to cure by surgical means, the author is not sanguine, but mentions favorably diminution of the calibre of the vagina, by pinching or removing strips of mucous membrane. The French editors mention here the operation of amputation of the uterine neck, as practiced by Huguier, of Paris, in these words:

"It was M. Huguier, we believe, who first practiced amputation of the neck in a case of prolapsus. He starts from a pathological point of view, the justice of which we will not discuss, namely, that prolapsus is but very rarely a true descent of the womb, but consists almost always in hypertrophy or engorgement of the uterus, which, remaining in its normal position, augments in size, and not being able to spread itself in every direction, by reason of the neighboring organs, lengthens itself little by little, and at last obtrudes into the vagina.*

* M. Huguier states that in the autopsy he has met with similar cases twenty-four times out of thirty.

Hence the idea of removing that portion of the neck that can be reached by simply separating the labia majora. The operation is extremely simple. We must, however, be careful not to wound the bladder or the rectum, and to disengage them before practicing the amputation. Furthermore, when the haemorrhage is abundant, as is ordinarily the case, it will be necessary to apply some ligatures. M. Huguier at first employed a bistoury to cut off the portion of the neck which he wished to remove; but the abundant haemorrhage induced him to have recourse to Chassaignac's linear *écraseur*; and now he always employs this latter method of amputation, after having denuded the neck by means of a bistoury, and carefully separated it from the neighboring organs."

It is a noteworthy fact that, in this connection, the operation of Marion Sims is nowhere alluded to, yet to this gentleman's exertions in this disease much credit is certainly due, and to his method of operating much confidence is accorded by the profession.

The articles upon Ante and Retroversion are short, but concise. The former he regards as very frequent in young women who have the pelvis much inclined, and states that if the patient be not pregnant no pain will be experienced, unless some alteration of structure has taken place in the uterine tissue, by tension of the peritoneal folds, which bind it to the posterior wall of the pelvis. The treatment recommended is the use of an abdominal supporter or Roser's pessary, altered so as to press against the body of the organ. The intra-uterine sound he reprobates highly. By the use of Roser's instrument for six or eight months many patients have been in his hands entirely relieved.

Of the latter of these affections he says: "Except in pregnancy, the retroversion of the womb is a secondary affection, produced by various maladies of the womb or of the neighboring organs." Very little is said of treatment.

With a page upon hernia nteri, we now arrive at the important subject of "inflammations of the womb," the author confining himself to the unimpregnated organ.

This state he regards as rarely fatal, but we frequently find in cadavers evidence of its having existed at some period of life.

"*Symptoms.*—The symptoms caused by acute metritis are local and general; the first are accessible to the means of exploration employed by physicians; for the others we must refer to the patients. The disease ordinarily commences with a very disagreeable sensation of fullness, of weight and heat in the pelvic region. The sensation at

the end of twelve or twenty-four hours changes into an intense pain, situated in the hypogastric region or about the sacrum, and is accompanied by violent tenesmus of the rectum and bladder. Ordinarily, the malady commences by a chill, followed by heat and a very rapid pulse. It is not rare to observe then frequent vomitings and quite severe diarrhoea, which soon cease, to give place to a more obstinate constipation. Ordinarily, when the disease commences during menstruation, the discharge is suddenly arrested. If, on the contrary, the catamenia come on during the course of the metritis, there is no sanguineous flow at all, or else, in very rare cases, it is very abundant, and becomes a real menorrhagia. Such cases have been lately designated under the name of *haemorrhagic metritis*.

"The least touch about the region of the uterus or groins causes the severest pain; as also when the finger introduced into the vagina makes a somewhat strong pressure upon the cervix and the *cul-de-sac* of the vagina.

"It is very rare that the hypertrophy of the uterus is so considerable that the fundus can be felt above the symphysis pubis through the anterior abdominal wall. When that is possible, we may with certainty conclude that there existed before the development of the metritis a notable hypertrophy, caused by a chronic engorgement, by fibrous tumors, etc., etc. When a peritonitis, of some little extent, accompanies the metritis, the existence of an effusion may sometimes be determined by peression and palpitation.

"By digital examination, an elevation of the temperature will ordinarily be found in the external genital parts, as well as in the vaginal canal, the walls of which are either very dry at the commencement of the disease, or are covered with a small quantity of mucus, which is ordinarily viscid."

The disease is quite rapid, six or eight days serving to accomplish its course.

It may terminate in cure, in chronic engorgements, or abscess.

The cause is generally imprisonment of menstrual blood, excessive sexual indulgence, intra-uterine pessaries, certain emmenagogues, &c.

The treatment advised consists in abstractions of blood from the os uteri, warm baths, emollient cataplasms, and warm injections of milk, oil, &c., into the vagina.

Chronic metritis, the most frequent termination of the acute, shows the following pathological changes:

"By a microscopic examination of the tissue of the womb, an augmentation of the cellular tissue is recognized in this affection, pro-

ceeding from the organization of the liquid effused between the muscular fibres. The nature of this disease would then be, in an anatomical point of view, a hypertrophy of the cellular tissue. When this hypertrophy is uniform throughout the organ, it necessarily produces a compression, or perhaps even a partial obliteration of the vessels; but when it is more developed in certain points, and more feeble or completely absent in others, it happens that in these last points the vessels, and especially the veins, dilate in consequence of the duration of the circulatory disturbance, and give rise to the partial hyperæmia of which we have spoken. It thus sometimes happens that from the increased pressure of the blood the dilated vessels burst, and produce sanguineous effusions of greater or less extent, which are met with, especially in the most internal and the most external layers of the tissue of the womb. The same causes which give rise to the disturbances in the circulation and to hyperæmia in the walls of the organ ordinarily conduce to a chronic stasis in the vessels of the uterine mucous membrane. And this stasis produces the pathological alterations which we shall hereafter describe in speaking of the chronic catarrh of the uterus. These alterations usually spread over the entire uterine mucous membrane, even to the mucous membrane of the vaginal portion, where it is characterized by simple erosions, or by more profound ulcerations."

Like eccentric hypertrophy of the heart, the cavity of the organ is increased in capacity.

Symptoms.—Pain and weight in the pelvis, disorders in urination, defecation and menstruation, exudative uterine membrane, pain and congestion in ovaries, dyspepsia, spænæmia, and the train of nervous symptoms observable in other uterine disorders. Physical signs: palpitation shows the fundus above the pelvic brim; the touch shows the os and cervix enlarged, tumefied, and little sensible to the touch; and the sound evidences increased capacity of the cavity.

Prognosis as regards cure unfavorable, except in women arrived at the change of life, when senile atrophy naturally occurs.

"It is in many cases very difficult, with complete certainty, to distinguish a simple engorgement from polypi and fibrous bodies still small and projecting into the uterine cavity. In such a case, it is necessary to pay particular attention to the catamenia, which, in the disease now under consideration, are ordinarily defective in quantity, while they are almost always very copious and very frequent when fibrous bodies or submucous polypi are present. Fibrous, subperitoneal bodies of any very considerable dimensions, are easily recog-

nized by palpitation, assuming as they do the form of tumors, rounded, mammillated, and more or less sharply defined. As to intra-uterine polypi and submucous fibrous bodies, they always cause, when they attain any considerable size, such a dilatation of the cervical cavity that the vaginal portion gets notably shorter, and sometimes even completely disappears, while in simple engorgement it is always hypertrophied and enlarged.

"The diagnosis will, in very many cases, be much more difficult, when we have to distinguish between engorgements of the inferior segment of the uterus and scirrhouss induration of the same portion; and we frankly avow that we do not know any discriminating symptom which is perfectly sure. We must take into account the age of the patient, the cause of the disease, if it is possible to discover one, and its progress and its influence on the general health. The extraordinary hardness of the vaginal portion and of the inferior segment of the uterus, which has been mentioned by many authors as a certain sign of cancerous infiltration of these parts, is not, in our opinion, so; for we have met many cases where the progress of the disease has in the end demonstrated that it was but a case of simple engorgement. For the difference which exists between the ulcerations of the uterine orifice, which are so frequent in this last disease, and the cancerous ulcerations of the vaginal portion, we refer to the special chapters upon these subjects. For the differential diagnosis of engorgement and incipient pregnancy, it is important, besides ascertaining the presence of the ordinary signs of pregnancy, to examine with care the state of the vaginal portion, which, in the course of the gravid condition, is always shortened and softened, while in engorgement it is constantly enlarged in all its dimensions, and becomes extraordinarily hard and resisting. Furthermore, we must admit that a single examination is not often sufficient to insure a correct diagnosis, and for that it is necessary for a long time to observe the progress of the disease, and to make repeated attentive examinations of the diseased parts."

The indications for treatment are, first to relieve the engorgement, or failing in this, to relieve the distressing symptoms resulting therefrom. The plan of operations best suited to the first end is this: Leeching every five or six days; warmth and moisture locally by warm hip-baths twice a day; injections and compresses; application to hypogastrium of tr. iodine; or of an ointment containing iodine or bromine; laxatives and mineral waters, as those of Marienbad, Kissingen, and Karlsbad. After using for three or four weeks the laxative mineral waters, he advises a change to the chalybeate, as those of

Brückennau, Bocklett, &c., &c. M. Scanzoni thus gives us a rational and efficient code of treatment, but curiously (as it appears to us) neglects some means of importance equal to that of any he advises; as, for instance, total abstinence from sexual intercourse, the recumbent posture during some hours of each day, and avoidance of muscular exercise. In addition to these, we have in some cases accomplished much good by lifting the congested organ out of the pelvis and keeping it raised by the use of Meigs' ring pessary; any other pessary than this would do harm.

Sixteen pages are devoted to acute and chronic inflammation of the mucous membrane of the uterus, when we arrive at those obscure diseases, "hydrometra" and "pneumo-hydrometra;" the first he regards as mere obstruction or stricture of the cervix uteri, with collection of fluid above; and the second, as this state, with decomposition of the pent-up liquid. The treatment is obviously to remove the obstruction.

Of ulcerations of the uterine os and cervix, the author recognizes these varieties:

- a*, Excoriation.
- b*, Granular ulceration.
- c*, Fungous "
- d*, Varicose "
- e*, Phagedenic "
- f*, Syphilitic "
- g*, Cancerous or tuberculous ulceration.

The plan of treatment presents nothing that is new, but at the same time very faithfully enumerates all that is at present known. With regard to local treatment, he says:

"It is almost indispensable, in order to obtain happy results in the treatment of these ulcerations, to have recourse to repeated cauterizations. As to the choice of caustics, the solid nitrate of silver suffices for ulcerations of little depth, where there are no wide-spread loss of substance, few granulations, and little disposition to hemorrhage. But if the ulceration is very extensive, covered with numerous granulations, and bleeding very easily, or, indeed, if no satisfactory result has been obtained from four or five cauterizations with the lapis infernalis, we should have recourse to stronger caustics, among which the acid nitrate of mercury, Pleuk's lotion, (corrosive sublimate two parts, camphor one part, alcohol sixteen parts,) deserve to be cited in the first rank. These liquids are applied upon the ulcerated surface by means of a pledge of lint. It is necessary, however, to use them

with the greatest precaution, in order that they may not come in contact with the vaginal walls, otherwise very deep ulcerations might result therefrom. It is also necessary to beware of repeating these cauterizations at too short intervals, for it has often happened, and we have ourselves sometimes observed it, that the neglect of these precautions was the cause of an abundant and long-continued salivation.

"The Vienna paste in the solid state, which, after the directions of Filhos, may be obtained by melting in an iron spoon two parts of caustic potash and one part of chalk, and immediately pouring the mass into a hot cylindrical mould, is a caustic still more energetic than those we have mentioned. Before making the cauterization, the extreme point of this caustic is dipped in alcohol and passed lightly once or twice over the ulcerations, which should be immediately dried with a pledget of lint. Then we remove, by means of an injection of cold water, the residue of the caustic, in order thus to protect the neighboring parts from the corrosive action. Filhos recommends vinegar for those injections intended to neutralize the caustic.

"If the ulceration resists these energetic cauterizations, we should employ the actual cautery, which in all cases conducts the most promptly and the most surely to the desired end."

Passing now without comment over some eighty pages devoted to fibrous tumors, polypi and cancer of the womb, we arrive at disorders of menstruation. He treats of these under seven heads.

"1st. The premature appearance of the courses. 2d. Their too tardy appearance. 3d. Their premature cessation. 4th. Their tardy cessation. 5th. The absence of the principal symptom, that is to say, the haemorrhage during the nubile period. 6th. The excess of the sanguineous flow. 7th. The difficult menstruation which is accompanied with violent pains."

Viciarious menstruation he regards as due to a predisposition to haemorrhage from some other organ, from some anomaly existing in it.

Dysmenorrhœa he treats of under two heads, "Nervous" and "Congestive," leaving that variety dependent upon mechanical cause to be considered when investigating such organic change. In connection with the etiology of the former he says:

"Finally, in an etiological point of view, the following circumstance also deserves consideration; that the abnormal nervous irritation of the uterus may give rise to reflex movements of the organ, and to a convulsive contraction of the cavity of the neck. Hence the escape of the blood which is already effused is impeded by an obstacle which irritates in its turn the motor nerves of the body and fundus of the

uterus, and thus provokes painful contractions. This is what to us appears particularly to take place in cases where, after intense expulsive pains, lasting perhaps several hours, the patients suddenly eject a considerable quantity of blood, partly liquid and partly coagulated, and find instantaneous relief."

The treatment advised is the use of opiate liniments and suppositories, or of medicated pessaries, containing narcotic substances. Also warm baths are advised, and chalybeate treatment in the intervals of menstruation. In congestive dysmenorrhœa he resorts to leeches, the waters of Marienbad, Karlsbad, &c., and sometimes iron. He has not used general blood-letting nor intra-uterine cauterizations.

For want of space, we are forced to pass over the chapters devoted to Inflammation of the Ligaments of the Uterus and of the Ovaries, and hasten through the rest of the work. The space devoted to ovarian tumors is well occupied by an exceedingly interesting and comprehensive essay. Operative procedure is considered under the following heads:

- a*, Puncture through abdominal walls.
- b*, " vaginal *cul-de-sac*.
- c*, Use of injections into the cyst.
- d*, Incision of the cyst.
- e*, Total extirpation.

The first he regards as objectionable, because merely palliative, and because the length of the intervals diminishes with the number of the punctures.

To the second method he is very partial.

" If the puncture by the vagina was always possible, the abdominal puncture would soon entirely disappear from chirurgical practice; but, unfortunately, this is not the case, for the conditions necessary for this operation are met with in but few patients; in fact, it is rare that the lower portion of the tumor descends sufficiently low into the pelvis to be accessible to the vaginal touch; and, furthermore, in many cases where the tumor can be reached, it does not present in its lower portion any cavity filled with liquid, but only solid masses of a sarcomatous, colloid, or cancerous nature."

Of the third he says:

" It results from all that we have said upon the subject of injections, that the dangers which this method presents are not compensated by sufficient advantages. Consequently, we shall do better to set it entirely aside, especially as many authors have demonstrated that it was not so sure as we have been told."

To the two last operations he objects very positively. "We consider," says he, "ovariotomy a surgical temerity," &c., &c.

Again we are forced to pass over all devoted to Abnormal States of the Vagina, until we arrive at Fistulæ, and this we regret to characterize as imperfect to a painful degree. The American reader will be surprised, indeed, when informed that in the bibliography of the chapter devoted to this subject the name of Sims does not appear, nor that of any writer in the English tongue, other than Sir Charles Bell.

Before concluding, we must notice a statement in the sixth part of the work, which is devoted to diseases of the external genitals. Upon the subject of perineal rupture the following very remarkable passage occurs:

"For the prophylaxis of perineal ruptures we will refer the reader to treatises upon the art of midwifery,* we will only add, that we know but a single method of preventing this unfortunate accident: it is the unbridling the vulva, which consists, at the moment of the passage of the head of the child, in making two incisions from four to six lines towards the posterior border of the vulva; a procedure which we have put to the proof more than one hundred times, and which we have described in detail in our *Traité des Accouchements*, (3d ed., p. 712.)"

We would suggest that, having tested the method of interference "more than one hundred times," the author must often have done it unnecessarily; that in so doing, he was guilty of meddlesome midwifery of no ordinary kind, and that such a precept instilled into the minds of students would do serious damage.

But already we have occupied so much space that we can go no further.

Before this work of M. Scanzoni came out in our language, we were always puzzled when asked by students what text-book they should employ; that difficulty disappeared with the examination of this book, for, although we have ventured to differ with the author in several points, the production, as a whole, commands our respect and admiration. The great criticism to be made on the manner in which the author has performed his work is this: while he has studied deeply German and French literature bearing upon his department, he has allowed himself to remain culpably ignorant of the advances made in America, and even in Great Britain. Had he been thoroughly in-

* M. Chailly has given excellent advice in his practical treatise on the art of midwifery.

formed upon the writings of Simpson, Bennett, Clay, and others of the latter country, and of those of Sims, Meigs, and others of this, in many cases his articles would have been much improved. When international communication is as easy as it is now, there is no excuse, no pardon, for ignorance of published views of the importance, for example, of those of Sims on Fistula, and Scanzoni was culpable in not informing himself upon them before aspiring to the dignity of authorship.

The American translator has performed his task faithfully, capably, and evidently with much labor and research; and certainly the profession is under great obligation to him for placing this work within its reach. Whoever opens to Anglo-Saxon investigation the rich field of German medical literature, (than which none other is more fruitful,) confers a favor upon those not able to read the language; and it is to be hoped that the many talented German physicians resident amongst us may be stimulated by the encouragement given to Scanzoni's work, to present us with others now unattainable. Though watchful for errors in Dr. Gardner's translation, we have discovered none of any moment. He introduces, we observe, a number of words not in general use, *e. g.*, "eochysis," effusion; "anamnestic," remembered; "ballotable," capable of being tossed, &c., &c.; but in all cases these will be found correct and legitimate.

As a matter of taste, we would suggest, in another edition, (which we prophesy will soon be called for, and encored even to the fifth, sixth, and seventh,) the omission of the editor's lecture on the "Influence of Medicines on the Milk," in which he gives us a new nomenclature of galactagentia, ischo- and phygo-galacties, &c., &c. Not because the lecture is not an excellent one, would we omit it, for so we esteem it to be, and right willingly would we applaud it in a work by the editor; but this work is by M. Scanzoni, and it strikes us as in bad taste to add entire lectures on any subject, unless in case of gross negligence or omission on the part of the author. But besides, the editor seems to lose sight of the fact that Scanzoni's work is one strictly confined to gynecology, while this lecture belongs eminently to a course on obstetrics.

The publisher, Mr. De Witt, deserves great credit for the liberal manner in which the work has been executed; the paper, type, and binding are excellent.

T. G. T.

Medical Jurisprudence. By ALFRED SWAINE TAYLOR, M.D., F.R.S., Professor of Medical Jurisprudence and Chemistry in Guy's Hospital, etc. *Qui nescit ignorare ignorat scire.* Fifth American, from the Seventh and Revised London, Edition. Edited, with Additions, by EDWARD HARTSHORNE, M.D., one of the Surgeons to the Pennsylvania Hospital. Philadelphia: Blanchard & Lea. 1861. 8vo, pp. 714.

We have before us a copy of the first American, from the first London, edition of Taylor's Medical Jurisprudence, "edited, with Notes and Additions, by R. Egglefield Griffith, M.D., published by Lea & Blanchard, in 1845." Since its first appearance, from fifteen to twenty thousand copies must have been circulated here and in England; and we candidly believe it alone has done more to give to the mass of practitioners, both legal and medical, just ideas of Legal Medicine than all the other publications in the language put together. Under these circumstances, we need hardly regret that the limits of our space forbid a more lengthy notice. We need but assure our readers that not only has the author, since the issue of the last American edition, twice thoroughly revised and still greatly improved, "in accordance with the advance of science and experience, derived from recent cases," what was already good, but Dr. Hartshorne, too, has performed his task faithfully and satisfactorily. The quinquennial prize of one hundred pounds, and a silver vase of like value, under the will of the late Dr. Swiney, has, by the Royal College of Physicians and the Society of Arts, been bestowed upon the author for this work, and the full justice of the award every reader of the book will confirm.

The American publishers have "gotten up" the work in their well-known unexceptionable style.

EDITORIAL AND MISCELLANEOUS.

— We have never performed a more pleasant duty than publishing the following letter. It is a copy of a large number of missives which (each with an accompanying bank-check) the mail-carrier distributed in the various parts of the city and Brooklyn. We publish it without permission from, or indeed the knowledge of, the writer; we cannot, however, resist the desire to let our readers participate in the thrill of enthusiasm which the perusal inspires. Who does not feel an ennobling pride as belonging to a profession whose spirit this letter embodies? Our most heartfelt congratulations at Dr. Squibb's truly

deserved success in business we gladly commingle with expressions of the esteem entertained for him by all that know him. Men as he is one, every true man delights to honor!

"BROOKLYN, November 12, 1861.

"DEAR SIR—About April of 1859, when the undersigned had suffered a loss of apparatus, etc., by fire, you and many others came forward through Dr. JAS. M. MINOR, and by a subscription amounting to nearly twenty-one hundred dollars, made good the loss sustained. This sympathy and pecuniary aid were most acceptable, and were gratefully received—but in the case of the pecuniary aid, with the mental reservation that the money thus so liberally bestowed should one day be returned. Since that time, principally through the preference given to a good class of medicinal preparations by the Medical Department of the Army, my business has been reasonably prosperous, and I now ask as an especial favor, to be permitted to return the amount of all these subscriptions, with the interest added. In sending you the inclosed amount, be assured that it is with no desire to impair, much less to discharge, the obligation under which your timely sympathy and aid placed me. On the contrary, this obligation is one of the most grateful recollections of my life, and this duty of reimbursing you for the inferior part of your liberality once performed, the obligation will remain with me as an unalloyed pleasure, and a debt only to be paid with the great debt of nature.

"Very respectfully, and very truly yours, E. R. SQUIBB."

— "American Journal of Ophthalmology."—Dr. HOMBERGER, a valued though but recent contributor to the pages of the MONTHLY, requests us to announce his design to publish a journal entitled as above, specially devoted to Ophthalmic Medicine and Surgery. To speak of the advantages which such a publication offers to the specialist as well as to the general practitioner seems almost superfluous. There was a time when all natural science could be grasped by one master-mind. As the knowledge of principles and facts accumulated, divisions and subdivisions were found necessary. Thus medicine, as a specialty, became separate from its fountain-head and co-ordinate streams, the physical sciences. Of late years, our science and art has received such an impetus by men of genius, and enlarged general medical education, having devoted themselves to special departments of study or practice exclusively, that it has become as impracticable to represent, without a division of labor, the actual advances in the whole domain of medicine by the periodical press, as it is impossible for one man to teach all the branches in our schools, or to attain pre-eminence in every branch in actual practice. We shall recur to this subject at a future time; meanwhile, we bespeak for the proposed Journal of a specialty as emancipated from general practice as that of the oculist has become, a favorable consideration.